Waiting to Agree Can Stifle Progress

December 9, 1957

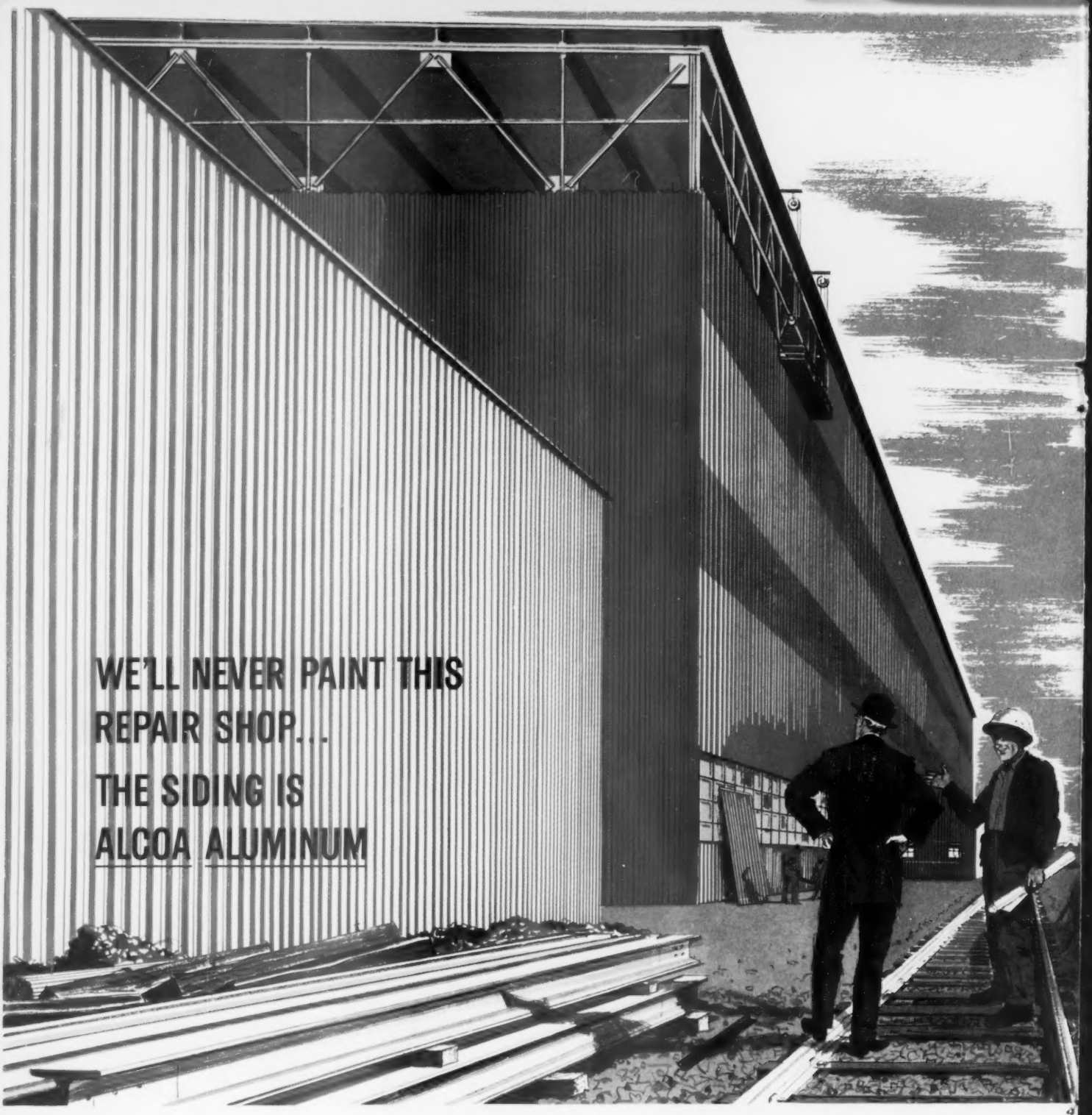
RAILWAY AGE *weekly*

What Russia ↑ means to U. S. railroads

Piggyback

What's Here? . . . What's Ahead?

50 cents A Simmons-Boardman TIME SAVER Publication



Alcoa® Aluminum was selected for Erie Railroad's new Meadville, Pennsylvania, car repair shop after engineers took a close look at costs. When they made comparisons with galvanized and stainless steel, they found first cost was lower with aluminum.

Aluminum's resistance to smoke, fumes and grime guarantees many years of maintenance-free service. It won't rust, rot or warp. Protective painting will never be needed. The embossed surface of the siding gives it natural attractiveness.

Where Erie required extra insulation—in machine shop, lumber mill, paint shop and storeroom—aluminum sandwich wall filled the bill. Its glass fiber core will keep these rooms dryer—easier and cheaper to heat and cool. And rustfree aluminum gutters, downspouts, sash, copings and gravel stops will save Erie many more dollars in upkeep.

Progressive railroaders are using more and more light, strong, rustfree Alcoa Aluminum—for new lightweight trains, tank cars, boxcar and baggage-car doors, crossbucks and wayside signs, freight and passenger stations. Get more information from your Alcoa distributor or nearest Alcoa sales office. Or write Aluminum Company of America, 2180-M Alcoa Building, Pittsburgh 19, Pennsylvania.

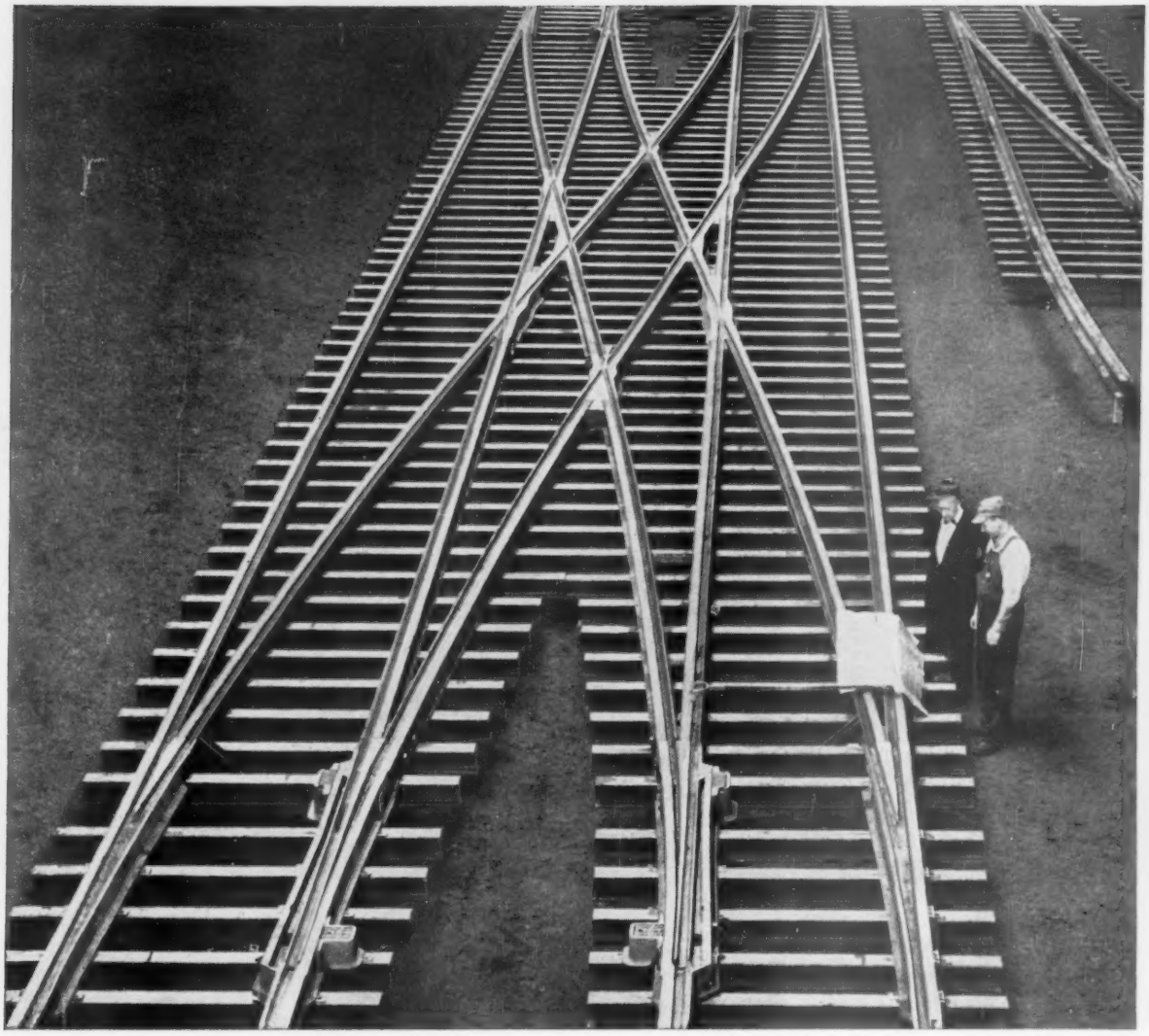
YOUR GUIDE TO THE BEST IN ALUMINUM VALUE

WE CHOSE ALCOA ALUMINUM MILL PRODUCTS

LEADER TO PROGRESS

NEW! "ALCOA THEATRE"
Exciting Adventure
Alternate Monday Evenings

RPI MEMBER



Why your special trackwork problems belong right here

A double crossover, built up from girder rail, reposes on our layout floors at Steelton, Pa., waiting for the final OK from our trackwork engineers before being dismantled and shipped to its final destination.

This gigantic trackwork gem is as close to perfection as any you'll ever see. It was painstakingly preassembled, checked, and rechecked before a single joint bar was approved for shipment to the customer. In our shops even the most routine trackwork order gets this same close attention to detail.

Why not call in a Bethlehem engineer to help you with your special trackwork problems? We know that when the track materials arrive at your site, they will fit perfectly. We also know that they will save you money through elimination of field-cutting, curving, and drilling of rails.

Our trackwork engineers are ready to go to work on your trackwork specialties. Just phone or write the Bethlehem sales office nearest you.

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

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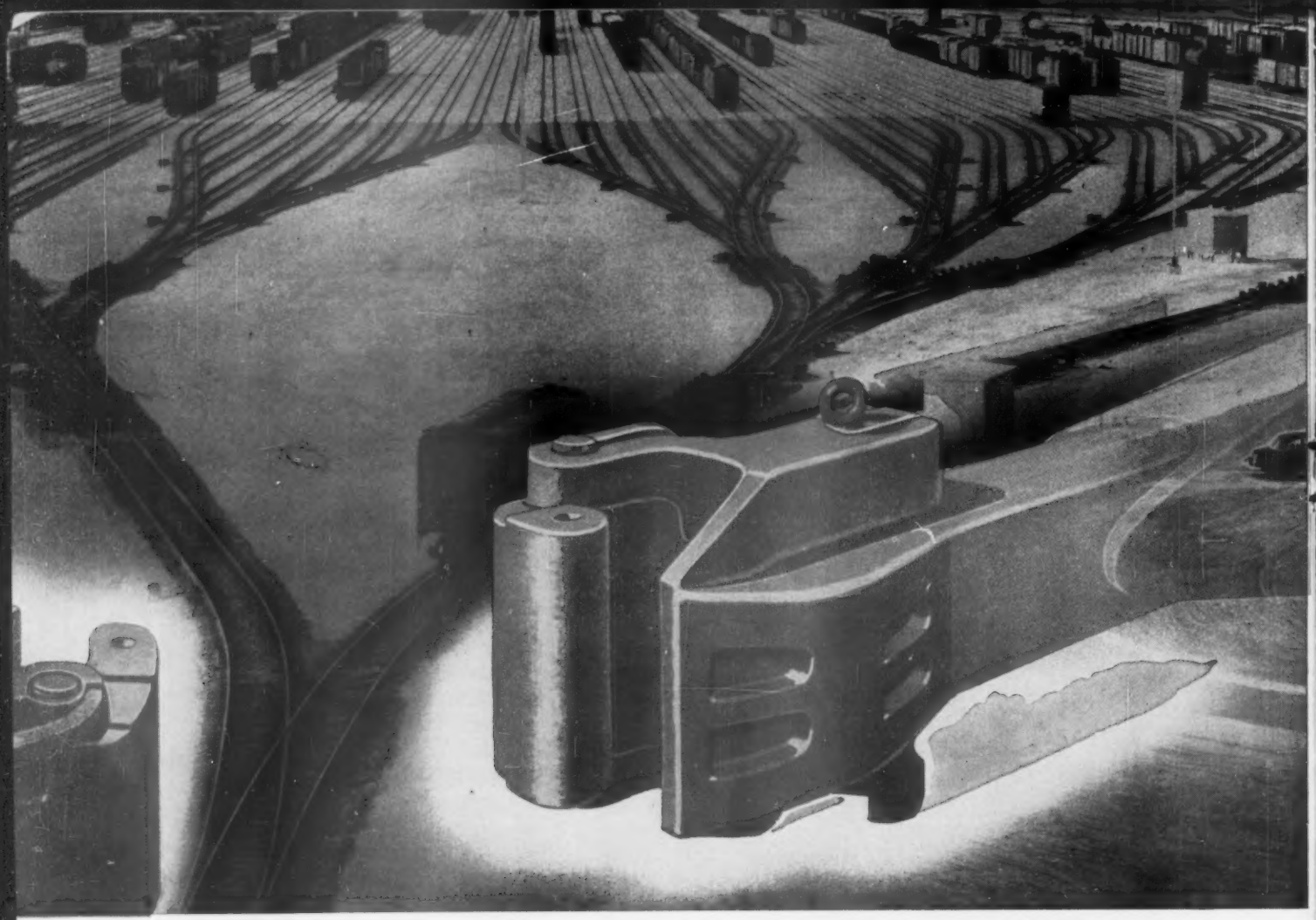

VELAC*

means Damage-Free Coupling in classification yards

Here's how the VELAC System makes it possible

THE elimination of impact damage was a major objective in the development of the VELAC *Fully-Automatic* Classification Yard System. Semi-Automatic yards speeded car classification but only partially solved the damage problem.

With the VELAC System, chances for errors in judging retarder leaving speeds have been practically eliminated. Automatic sensing devices measure car weight, speed, tangent track rolling resistance, curved track rolling resistance and track fullness. This information is instantly evaluated in an electronic computer in order to release each cut of cars at the proper speed to assure damage-free coupling.

From an economic standpoint, the savings made possible by faster classification and the reduction in damage costs quickly pay for the installation of a fully-automatic VELAC System and promote future profits.

*Trademark

UNION SWITCH & SIGNAL
DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY
SWISSVALE, PENNSYLVANIA

NEW YORK.....PITTSBURGH.....CHICAGO.....SAN FRANCISCO

RAILWAY AGE *weekly* December 9, 1957 • Vol. 143, No. 24

Week at a Glance

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JACKSON TRACK MAINTAINER GETS TOP PRIORITY

on the 1958 equipment recommendation lists of the vast majority of roads using power tampers. The reason is simple: Judged from any angle, versatility, economy, efficiency or dependability the JACKSON MAINTAINER is decidedly superior. It gives you maximum consolidation under each tie and right under the rail, the vital load-bearing zone . . . in all kinds and conditions of ballast materials . . . in all lifts of track, in all production tamping . . . faster and better spot tamping than can be done by any other means. Let us give you the facts which so plainly indicate why most roads are using JACKSON MAINTAINERS, and lots of them. Why not phone, right now!

JACKSON VIBRATORS, INC.
LUDINGTON, MICHIGAN

Week at a Glance CONT.

Current Statistics

Operating revenues, nine months	
1957	$7,909,421,720
1956	7,824,822,128
Operating expenses, nine months	
1957	$6,180,350,497
1956	6,027,733,256
Taxes, nine months	
1957	$827,403,872
1956	831,431,170
Net railway operating income nine months	
1957	$699,477,372
1956	744,662,636
Net income estimated, nine months	
1957	$538,000,000
1956	612,000,000
Average price 20 railroad stocks	
December 3, 1957	66.59
December 4, 1956	94.85
Carloadings revenue freight	
Forty-seven weeks, 1957	32,725,206
Forty-seven weeks, 1956	34,451,809
Average daily freight car surplus	
Wk. ended Nov. 30, 1957	28,503
Wk. ended Dec. 1, 1956	6,742
Average daily freight car shortage	
Wk. ended Nov. 30, 1957	139
Wk. ended Dec. 1, 1956	4,040
Freight cars on order	
November 1, 1957	65,718
November 1, 1956	122,250
Freight cars delivered	
Ten months, 1957	84,639
Ten months, 1956	53,007

Advertising Sales Department

Duane C. Salisbury—vice-president, director of sales

New York 7, N. Y., 30 Church st., WOrth 4-3060
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the industry. On some things, like rates and fares, and promising equipment innovations, individual action can pay off.

Short and Significant

The first of four 'shipper surveys' . . .

to be undertaken by the Census Bureau within the next year has just begun. The bureau is starting the field collection phase of a survey of the transportation of fresh fruits and vegetables from shipping points in or near the growing areas to market. Second survey will cover grains moving through terminal elevators; the third will be concerned with canned foods. Subject matter of the fourth survey has not been decided.

Coupler firms are in 'a cat-and-dog fight' . . .

for business—and that's not restraint of trade. With that comment, a federal judge has dismissed the U.S. antitrust suit against five railroad suppliers: National Malleable, American Steel Foundries, Buckeye Steel Castings, Symington-Gould, and McConway & Torley. They were supported in the case by the AAR. The court congratulated the manufacturers for their safety achievements—the result of "teamwork and cooperation."

Snagged Canadian labor contract dispute . . .

is being turned over to a conciliation board. Fifteen unions seeking wage rises and other benefits January 1, have been branded "irresponsible" by railroad spokesmen. They estimate the demands would cost the Canadian National and the Canadian Pacific alone $128,000,000 annually—and there are four other roads involved, plus the Railway Express Agency.

Court order blocks sale of TP&W . . .

Federal Judge Gunnar H. Nordbye granted the M&StL a temporary restraining order blocking sale of the TP&W to the Santa Fe and Pennsylvania. A three-man statutory court may hear the case in April. The Nickel Plate was also given authority to intervene and participate in the case. The current suit is the latest in a series of moves to bar AT&SF-PRR joint control of the strategic TP&W. M&StL seeks sole control of the Illinois line; NKP wants to be included on a part-owner basis.

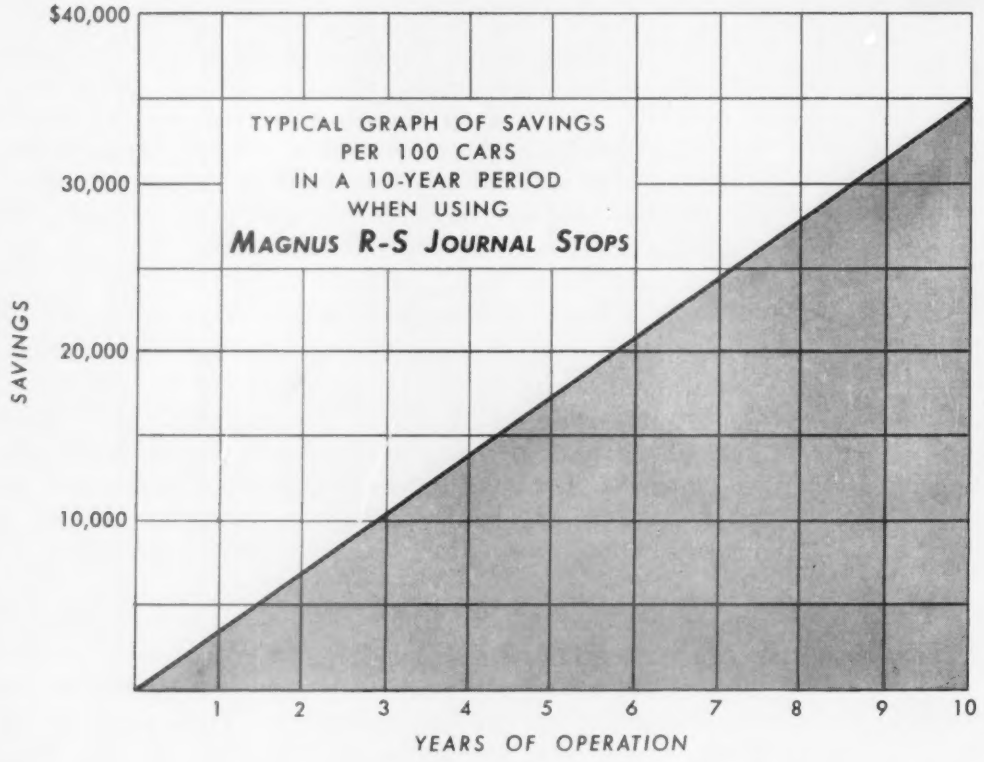
First dividend ever for the Western Maryland . . .

was voted at 75-cents a common share—lower than some observers expected. Earnings should come to about $12.50 a share for the year, WM President Grotz predicted. About a third of the WM common is held by the Baltimore & Ohio.

That leech-like transport tax . . .

is chasing foreign commerce from United States ports into Canada. New York Central Vice-President Horning says some industries insist on routing shipments to the midwest via the provinces to dodge the 3% levy.

TAKE A GOOD LOOK AT JOURNAL-STOP SAVINGS



Savings determined solely on basis of reduced out-of-pocket expense in bearing assembly maintenance—with no consideration or value applied to increased car availability and greater car utilization, which R-S Journal Stops should make possible.

An investment in Magnus R-S Journal Stops will save you over $35.00 per car per year — will return the complete cost of the Stops in less than 3 years.

WHEN YOU BUY a new freight car, you're interested not only in first cost — but how much you will have to spend to keep it on the go for the rest of its useful life. Let's project the *journal bearing costs* for a 10-year period to see:

Total operating cost for solid journal bearings in freight service is $81.37* per car per year. But when you install Magnus R-S Journal Stops, you cut annual operating and maintenance costs to $46.12* per car. That's a *saving* of about $35.00 per car per year. You pay the complete cost of R-S Stops and installation in less than 3 years—get a $350.00 return for a $105.00 investment in only a 10-year period.

With Magnus R-S Journal Stops you stabilize the solid bearing assembly — give the bearing a chance to perform at optimum efficiency of which it is inherently capable. You reduce hot boxes, cut routine service attention, double bearing life, reduce wheel flange wear, and eliminate false brake piston travel. Equip all freight cars with R-S Journal Stops — and railroads will save $70,000,000 per year in freight car operating costs.

For complete information on the low-cost way to get better bearing performance, *and fast,* send for "Design and Performance Data on Magnus R-S Journal Stops", Magnus Metal Corporation, 111 Broadway, New York 6; or 80 East Jackson Blvd., Chicago 4.

**Cost based on data compiled by the Mechanical Division of the Association of American Railroads in 1955 as revised by the Technical Advisory Committee of Bearing Manufacturers to correct for bearing consumption.*

MAGNUS

Solid Bearings

MAGNUS METAL CORPORATION

Subsidiary of **NATIONAL LEAD COMPANY**

RAILWAY AGE
The Industry's Newsweekly

Public Need Is Transport 'Guide'

Greater coordination and integration of service is imperative, says Commissioner Minor; makes point-by-point reference to content of Railway Age OUTRAGE issue.

Traffic belongs wherever the shipper entrusts it, says Interstate Commerce Commissioner Robert W. Minor.

It does not "belong" to railroads, to barges, to trucks, or to any other mode of transportation, he told the Ohio Valley Transportation Advisory Board in Cincinnati last week.

The public need for all forms of transportation stands today as a guidepost for the industry, showing the way toward more efficient use of the existing transportation plant. Such a guidepost, he said, will have great ultimate benefit for shipper and carrier alike. "It is not an easy road, for it will require casting aside ancient prejudices. I am referring, of course, to the achievement of greater coordination and even integration of service."

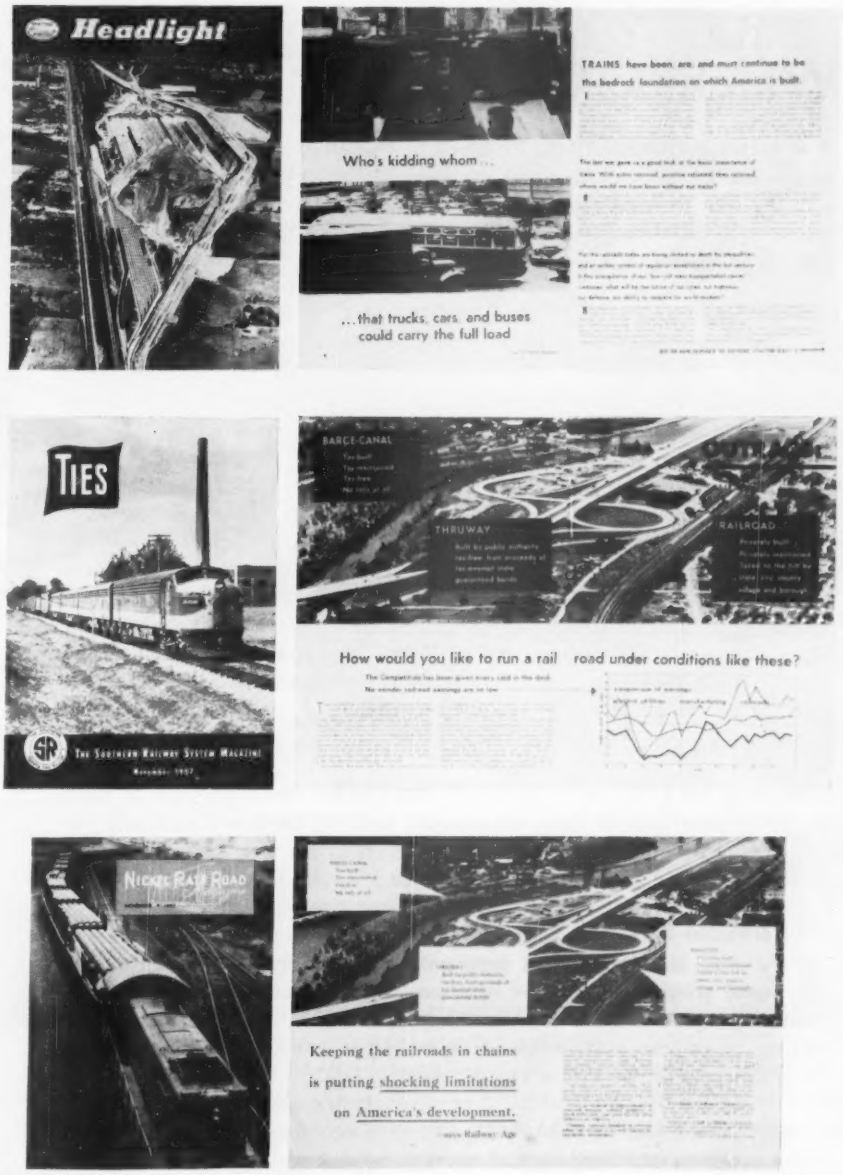
"I am not here advocating transportation companies, for. . . the law discourages this," he said. "And even if it did not, the bustling and thriving motor carrier industry. . . is here to stay. It is a concrete example of the response of initiative and enterprise to public demand. That industry is properly adamant in its opposition to a subordinate role in the transportation picture."

Coordination, he added, is also a transportation preservative—"it prevents the waste of needed transportation services. . . We cannot continue to waste transportation and expect the system to remain healthy."

The commissioner took up in some detail several points made in the recent [October 7] OUTRAGE issue of Railway Age:

"I do not intend to review the Railway Age article, but a few comments are in order," he said. "The question of public subsidy to other modes of transportation, as expressed in public highways, air terminals and CAA safety programs, waterways, and the like, has been vigorously denied or defended by those competing modes. In fact, some have countercharged that the initial grants of right-of-way and other lands to the early railroads amounted to far greater subsidization. This is an area which we must assume will be well explored" [at next month's Senate hearings].

Mr. Minor made this additional point-



WIDESPREAD CIRCULATION was given Railway Age's OUTRAGE issue through presentation in these and other railroad company magazines. This, on top of normal readership of Railway Age, plus special distribution of 125,000 reprints, got the message across in unprecedented fashion. With such a background, Commissioner Minor's comments on the issue take on extra significance.

by-point comment on the Railway Age OUTRAGE issue:

● Tax inequality—"The ICC has repeatedly urged Congress to remove the 3% excise tax on all public transportation. We believe it discriminated against public carriers and has in many instances been a significant factor in the trend toward proprietary hauling."

● Inequality of regulation—"The ICC is keenly aware of the inroads made on public transportation by carriers exempt from economic regulation. The commission has urged the Congress to amend those sections of the Interstate Commerce Act which relate to carriers of agricultural commodities and to private carriers. The agricultural exemption has been so broadened by judicial interpretation that it now extends far beyond the original intent of Congress, and, in the guise of private carriage, many for-hire carriers evade their responsibilities under the law."

● Rate regulation—"The article cites six rate cases which demonstrate, according to the author, that 'railroads cannot build their business simply and squarely on their inherently lower costs.' Of the six cited cases, one was at the time of publication still pending before the commission. . . . The other five were less recent—one of 1946 vintage—and the average age of the five was seven years. This is significant because it is only in comparatively recent cases that railroads have brought even adequate cost data to the commission in an effort to defend these 'inherently lower costs' on which they presumably base competitive rates . . . "

● Archaic regulation—"The Interstate Commerce Act has been revised and amended again and again during its 70 years of life." As for "monopoly-thinking", Commissioner Minor indicated that "there is some suspicion that, until recently at least, the shoe belonged on the other foot, and that it was the rails themselves that were indulging in monopoly thinking. The decision, many years ago, to reject the motor carrier as a transportation partner was clearly lack of vision. Under existing law and fact that decision lies beyond recall. Even now. . . there is a tendency to ignore the potentialities of motor carrier competition and the benefit of coordination with motor carriers; a tendency to compete for uneconomic traffic which, in the long run, cannot benefit the rails' financial picture."

Commissioner Minor took a "guardedly optimistic" position on the future of the railroad industry. But he added that "there must be . . . a frank appraisal on the part of railroad management . . . government. . . and the using public of the future role of the railroad. For that reason, if no other, I am gratified that the Senate Interstate and Foreign Commerce Committee has moved to schedule early hearings to explore this area." (Railway Age, Dec. 2, p. 54.)

Warning—He cautioned against viewing the railroads' troubles as belonging solely to railroads. Those ailments, he theorized, are "symptoms of a larger disease affecting our entire public transportation system. With their massive investment and inherently less flexibility, both cost- and service-wise, railroads are by nature more vulnerable to economic ills and it follows that they would be the first affected. But it follows, too. . . that other segments of the regulated public transportation system are even now facing similar problems."

Their ability to avoid the "precarious posture" of the rails, he said, depends on several things, among them "the farsightedness with which management attacks those problems" and "the ability of the rails to recover from their present difficulties" because the public transportation system is, "whether or not the various segments of it recognize the fact, a cohesive and integrated system."

Commissioner Minor reaffirmed his belief that the best way to meet the public's transportation demands "is through our traditional methods of private venture. But the alternative is clear, distasteful though it may be, and if a major segment of our public transportation system becomes government-owned or operated, I doubt that the remainder could successfully resist."

"It took a sputnik to arouse the nation to a realization of the threat to our survival," Commissioner Minor said. "Perhaps the threat to public transportation, focused now on the railroad industry, will arouse us from inaction."

Watching Washington *with Walter Taft*

● **WHITE HOUSE CONFERENCE** on the railroad situation was just getting under way last Thursday afternoon as this issue went to press. The industry was represented by a committee of nine top executives—PRR's Symes, NYC's Perlman, B&O's Simpson, ACL's Rice, Frisco's Hungerford, Santa Fe's Gurley, IC's Johnston, and AAR's Faricy and Loomis.

● **CONFERENCE WAS REQUESTED** last month by 21 executives who were then in Chicago for the AAR annual meeting. They hoped to have their committee meet with President Eisenhower, but the President's illness ended that prospect. Administration representatives there included Sherman Adams, assistant to the President, Gordon Gray, director of defense mobilization, Louis S. Rothschild, undersecretary of Commerce for transportation, Gabriel Hauge, special assistant to the President, and Raymond J. Saulnier, chairman of the President's council of economic advisors.

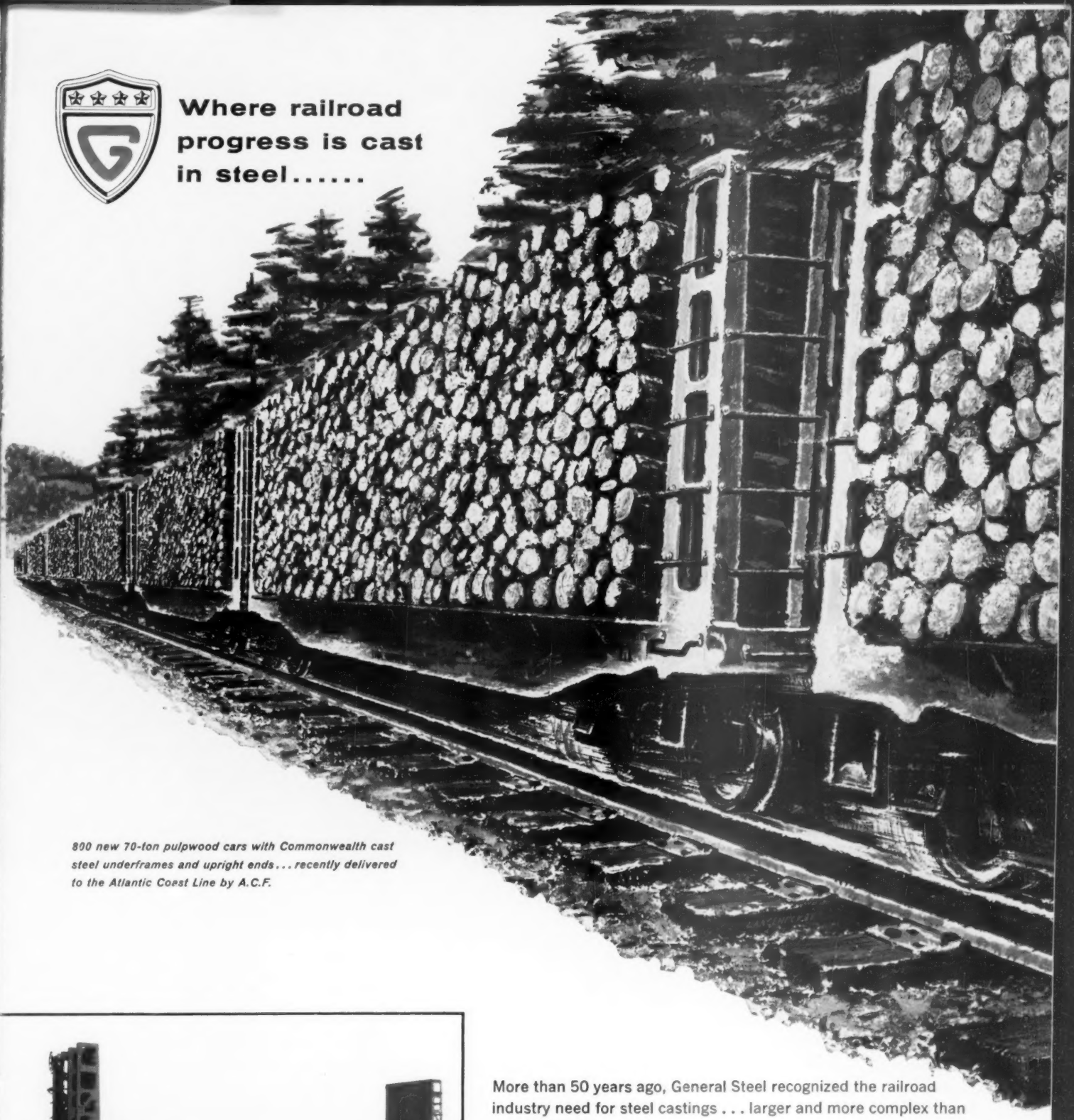
● **AGENDA WAS NOT ANNOUNCED,** but the railroad executives would naturally make a presentation based on the industry's program for legislation and administrative action calculated to alleviate its plight. Their suggestions would thus include the "shall-nots" rate-freedom proposal recommended by the Cabinet Committee, removal of statutory and administrative restrictions which prevent railroads from becoming "transportation companies," and changes in the tax laws.

● **TOP BILLING AMONG TAX MATTERS** would perhaps be given the proposed repeal of levies on amounts paid for for-hire freight and passenger transportation. That proposal has been to the fore for several years, and it has the support of other carriers, the ICC and shipper interests.

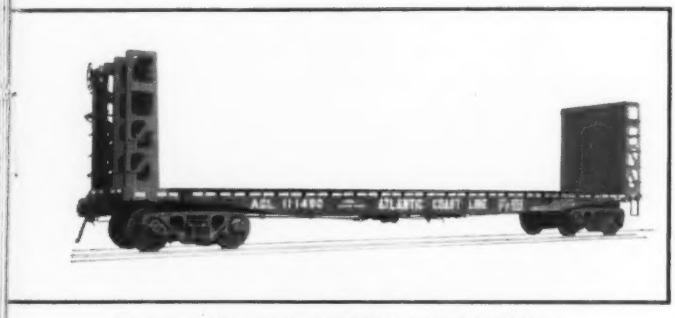
● **OTHER TAX DISCUSSIONS** at the conference were expected to point up the need for more liberal depreciation and amortization arrangements. This need arises as a result of inflation which has augmented problems of financing replacement of facilities depreciated only on the usual basis of writing off original cost. Proposals to cure that situation could win support from other industries with a like problem.

● **AAR'S FARICY HAS SAID** that prospects for continuing the equipment program into 1958 depend upon doing one of these three things: Increasing earnings of the railroads; reducing their present income-tax rate; or permitting them to accumulate, tax-free, such reserves as will meet the higher costs of the cars they are acquiring in replacement of those they are retiring.

Where railroad progress is cast in steel.....



800 new 70-ton pulpwood cars with Commonwealth cast steel underframes and upright ends... recently delivered to the Atlantic Coast Line by A.C.F.



Commonwealth cast steel underframe and interlocking upright ends simplify pulpwood car construction; provide greater strength, permit easier loading, maximum capacity.

More than 50 years ago, General Steel recognized the railroad industry need for steel castings . . . larger and more complex than ever before conceived.

Advanced engineering and production techniques developed through its pioneering have made General Steel a unique supplier to today's railroads. Its Commonwealth one-piece products . . . for freight cars, passenger cars and locomotives . . . utilize cast steel's great strength at minimum weight, exceptional ruggedness and freedom from maintenance to cut operating expenses for users throughout the world.

Plan wisely for the future . . . invest in Commonwealth products.

GENERAL STEEL CASTINGS

GRANITE CITY, ILL. • EDDYSTONE, PA. • AVONMORE, PA.

confirmation by the Crusader

Twenty years ago the Reading placed the Crusader in operation between New York and Philadelphia.

Except during periods of overhaul, it has never missed a schedule.

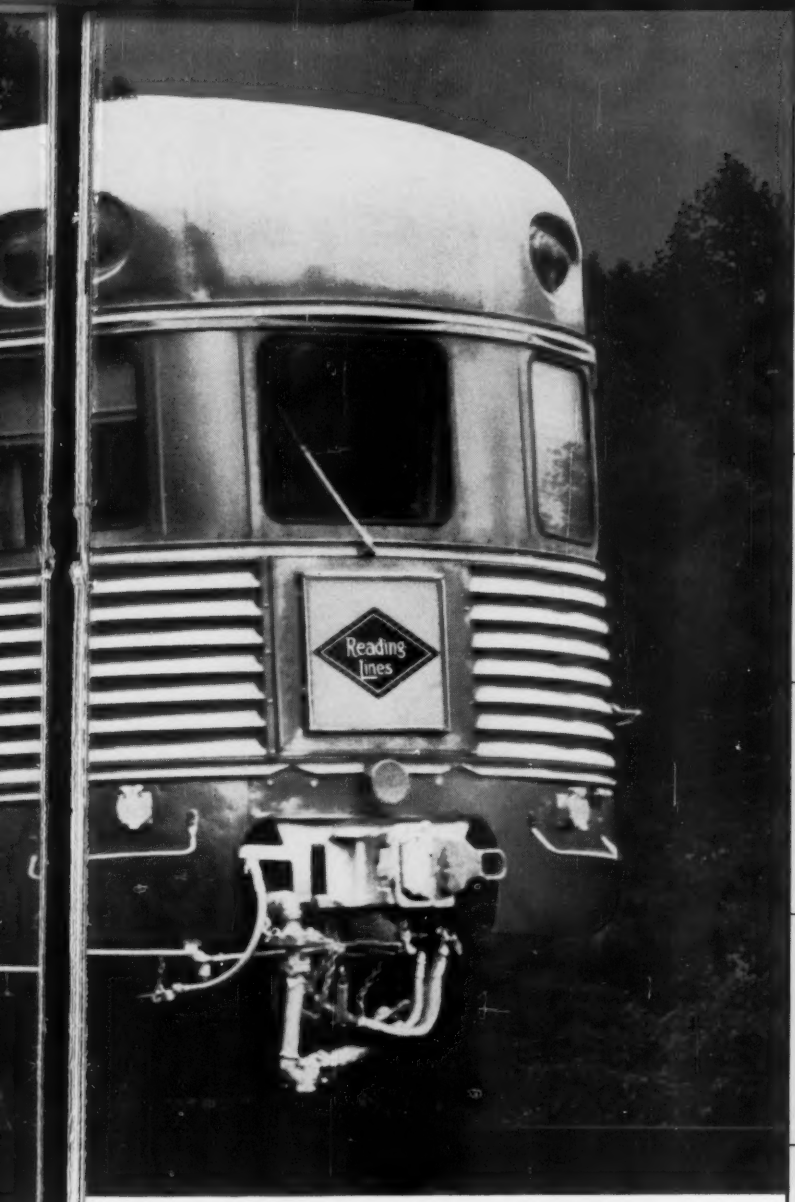
This year the Reading shopped the train for its periodic inspection and overhaul, and, as in the past, found its structure perfect.

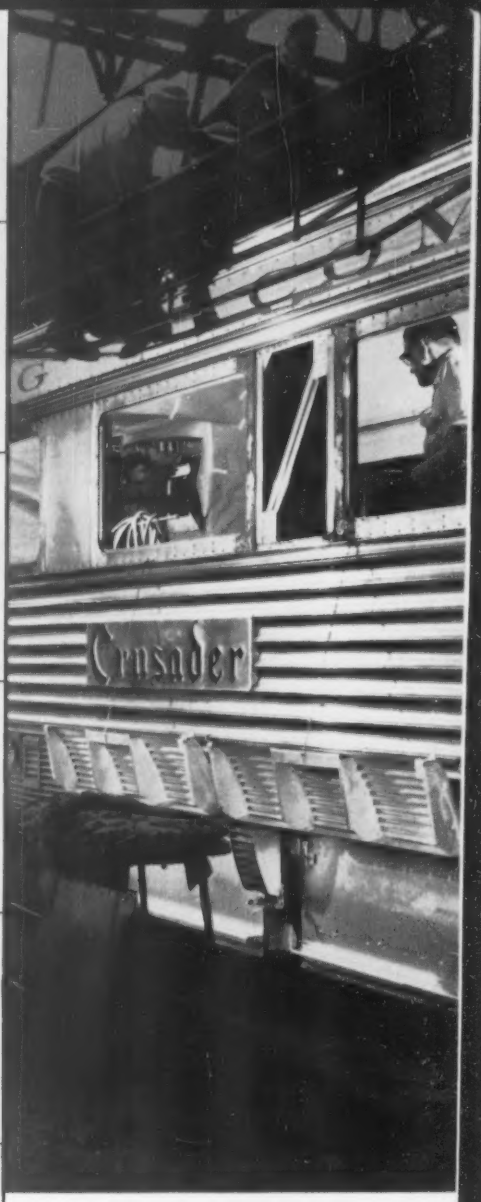
No structural parts of the Crusader have ever needed replacement because of corrosion or wear.

Here is further confirmation of the enduring value of stainless steel construction which has repeatedly demonstrated that the first cost is the last cost. As an engineer commented, viewing the overhaul of another Budd stainless steel train which had travelled more than four and a half million miles: "These cars approach what has always been considered an engineering impossibility—a permanent structure."

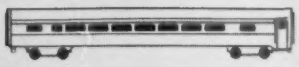
There are remedies for so-called passenger losses other than abandonments, as has been proved by many railroads and many noteworthy train successes. Where losses do exist every alternative deserves to be explored. We are prepared to help.

THE BUDD COMPANY, Philadelphia 15.

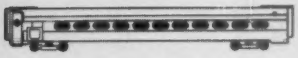




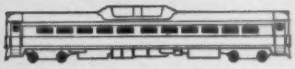
The Crusader undergoing periodic overhaul at the Reading shops, Reading, Pa. The most intensive inspection failed to reveal any deterioration of the structure caused by corrosion or wear.



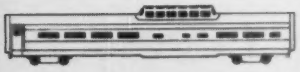
MODERN COACHES, DINERS, SLEEPERS



PIONEER III ADVANCED DESIGN

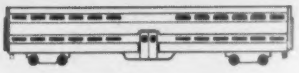


ALL-PURPOSE RAIL DIESEL CAR

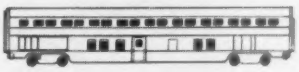


DOME COACH

ALL-ROOM SIESTA COACH



DOUBLE-DECK COMMUTER CAR



HI-LEVEL CAR

RAPID TRANSIT CAR

Building Cars to fit the Need

Recognizing that railroads face many different needs in providing efficient, attractive, passenger service, we have developed a variety of types to fit these needs.

They include ultra-lightweight cars such as Pioneer III. Dome cars. Double deck commuter cars. RDC—self-propelled. Siesta Coach, with enclosed rooms for forty passengers paying coach fares. Hi-Level cars, where everybody rides upstairs.

All are designed for high capacity and minimum maintenance.

Built

A MILESTONE IN **RIBBONRAIL** SERVICE!

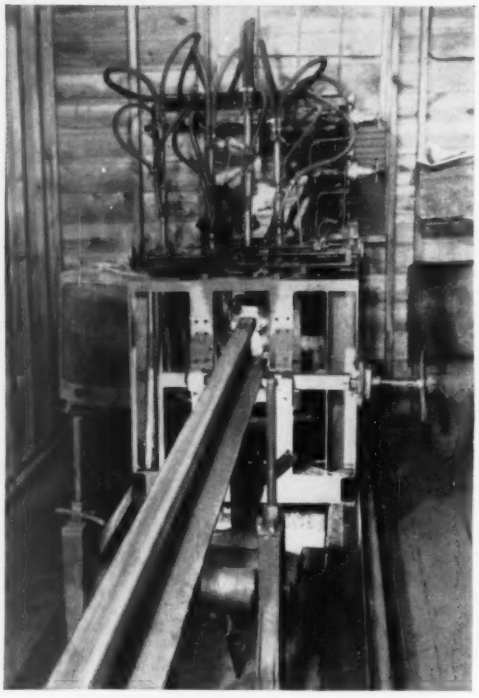
Pressure Welding Proves Efficient, Economical

With completion of the 500,000th oxy-acetylene pressure weld, a milestone in the acceptance and development of RIBBONRAIL service has been passed. Today, railroads are saving thousands of dollars annually on track maintenance in yards and stations, on bridges, and in main line track . . . and still greater savings are in the making.

Welded Joints Now Cost Less Than Bolted Joints

The history of welded rail is one of increased operating efficiency, and lower weld cost. Today it actually costs less to weld rail than it does to connect it with bolted joints. Smooth, "clatter-free" welded rail eliminates the cost of battered rail end build up, and signal bond and joint bar maintenance. Yes, RIBBONRAIL service is the trend in modern railroading.

Plan your RIBBONRAIL service program now. Call or write your local LINDE representative for detailed information.



Weld passes through a "normalizing" machine above. When it cools, the weld will be ground—and then ready for service.

RAILROAD DEPARTMENT

LINDE COMPANY

DIVISION OF UNION CARBIDE CORPORATION

30 East 42nd Street, New York 17, New York

In Canada: LINDE COMPANY, Division of Union Carbide Canada Limited, Toronto

"Linde," "Oxweld," and "Union Carbide" are registered trade-marks, and "Ribbonrail" is a service mark of Union Carbide Corporation.

The familiar symbol of over forty years' service to the railroad industry.

Current OPERATING DEPARTMENT Questions

Do Modern Retarders Cut Number of 'Don't Hump' Loads?

Here's one answer to this question. There are more to come.—*G.C.R.*

"Due to the effective control in the automatic electronic retarder system the only restricted commodities are high explosives and livestock.

"In addition to this restriction car inspectors occasionally restrict certain cars which because of the condition of the load (poorly braced, etc.) may not successfully be handled through the retarders.

"Our piggyback cars are handled into and out of our Houston yard on the west end of trains, which is the end opposite the hump. The ramp is located adjacent to the west end so those cars are handled between arriving and departing trains and the ramp in direct movement by a yard engine without routing them over the hump. We have, however, humped an occasional piggyback with a loaded trailer without difficulty or impact damage.

"The removal of commodity restrictions in our hump operation is attributed to the modern electronic automatic equipment, satisfactory grades, uniformity in curve resistance, and our trained personnel—both in maintenance and operation." —*R. De Waal, general manager, Texas & New Orleans.*

Do Retarders Permit Humping of Explosives?

"We have modern retarder yards at Milwaukee, St. Paul and Bensenville. The only commodities restricted are: livestock; explosives; and dimensional or unusual loads that move at restricted speed.

"We do not have piggyback service and therefore have had no experience with humping such loads.

"Classification tracks of the proper gradient, and speed controls [of the retarders] mainly account for our ability to hump safely all commodities except those named above."—*W. J. Whalen, vice-president—operations, Chicago, Milwaukee, St. Paul and Pacific.*

What Kind of Supervisory Job Training?

Some answers to this question appeared in this space in the issues of October 14 and 28, and November 11. I had thought we had disposed of this subject temporarily but along came the letter quoted below. Its authors wish to retain their anonymity.

Readers may remember that the question was prompted by the remarks of a chief executive who wants to have the holder of any given position "educated" so that he really knows his job and does it well.—*G.C.R.*

"We would like to raise a few questions and comment briefly about the ideas which were expressed under the above heading in the issues of October 14 and 28.

"We have no quarrel with the chief executive who said that he is 'more and more convinced that education in specific railroad duties is just as important a part of management development as training in managerial techniques.' Those of us who have spent some years in railroad personnel work believe the importance of each should be appropriately recognized. This would give the development of personnel, at all levels, the high priority among management 'musts' it should have.

"We agree that the 'first requirement of a successful program is corporate climate.' It is the responsibility of any management to create the climate in which personnel development can take place. 'Create' is the key word here because the 'climate' just does not exist without design and effort. Better still, we should say create and maintain, for maintenance is equally important.

"The recognition of the importance of training in the area of managerial techniques is in itself progress. How many railroad officers have had systematic help in defining their responsibilities relative to organization, manpower, materials, equipment, or money? We suspect that most of them have learned these things the hard way after much expensive trial and error, or they have appropriated the methods, good or bad, of their former supervisors.

"Who has given the rising supervisor guidance in the development of skills in analyzing, creating, planning, managing, and follow-up? For the most part, he has been left 'on his own.'

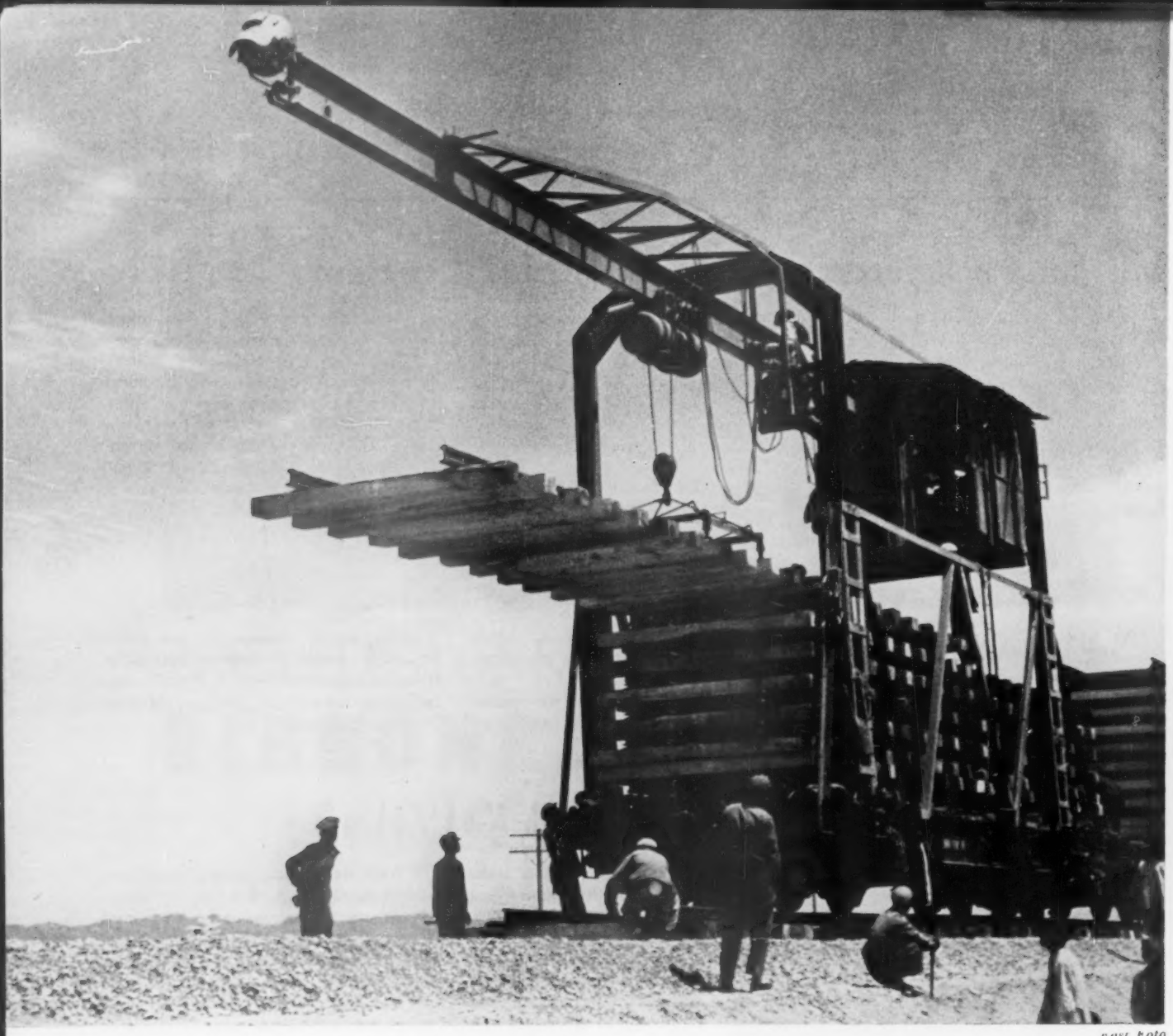
"The general manager who runs his job 'like a trainmaster' or the department head who operates 'like a chief clerk' need assistance in managerial techniques. However, by performing in this way, they are using the methods which their job experiences have taught them. When asked recently what top supervisors of his company were getting from an 'off-the property' development course, a railroad officer said, 'They are learning what it means to be managers.'

"We in the railroad industry barely have scratched the surface in the area of 'education in specific railroad duties.' We need to provide more opportunities for our employees to study basic supervisory techniques such as 'job instruction.'

"The average supervisor spends much of his time with subordinates doing one or more of the following: advising, correcting, explaining, questioning, and showing. Yet rarely does he bring to the supervisory job the high degree of instructing skill that is all important and only infrequently does his management provide him with the necessary training.

"We applaud Railway Age for giving space to this important subject. Continuous emphasis on it seems necessary."

CONDUCTED by G. C. RANDALL, district manager, Car Service Division (ret.), Association of American Railroads. This column runs in alternate weekly issues of this paper, and is devoted to authoritative answers to questions on transportation department matters. Questions on subjects concerning other departments will not be considered, unless they have a direct bearing on transportation functions. Readers are invited to submit questions, and, when so inclined, letters agreeing or disagreeing with our answers. Communications should be addressed to Question and Answer Editor, Railway Age, 30 Church Street, New York 7.



East Photo

Between 1945 and 1950, Russians doubled track mileage.

While Russians Are Rushing Track

Technologically, this country is engaged in a life-and-death race with Russia. That fact is well known and accepted. Equally well known, and begrudgingly accepted, is the fact that the United States has no comfortable margin of superiority, no room at all in which to be complacent.

The question is broader than the immediate one of Sputniks and missiles. It involves everything we do—in science, in industry, in our whole defense. As Dr. Vannevar Bush told the Senate not ten days ago, "We must divest ourselves of smugness and complacency and get to work."

Take the single case of railroads. Admittedly, they are the backbone of America's commerce. This is no less true of Russia, a sprawling land of great distances. And as this paper pointed out on October 7, as far as we can tell, Russia is building railroads all the time. But we are not building. We are weakening those we already have.

Look at the record again: There are 40,000 fewer freight cars in this country than just 10 years ago. The passenger fleet has shrunk by 7,000 cars. Tracks in service have declined by 15,000 miles since 1940. Railroads just aren't being allowed to earn enough money to hold their own, much less grow. We are not using the profit incentives of a free enterprise system to gain the benefits of its real strengths.

And what is Russia doing all this time? They shroud much of their progress in secrecy, but it's reported they doubled their mileage in service between 1945 and 1950. Work is under way now to increase single-track capacity by 30%, while double-track capacity is being doubled. They are making strides in signaling, in cars, in locomotives. They are working toward the development of a 100-ton freight car; they have recently introduced a 4,300-hp 138-ton electric locomotive designed to speed trains over mountains and plains at better than 60 mph. Since the discovery of new oil fields in 1948, dieselization is moving

The U.S. has reduced tracks in service by 15,000 miles since 1940.

. . . We're Ripping It Up

ahead rapidly. Complete replacement of steam with electric and diesel power is envisioned in 15 years. The economic consequences of the move may be even more pronounced than they were in the U.S.

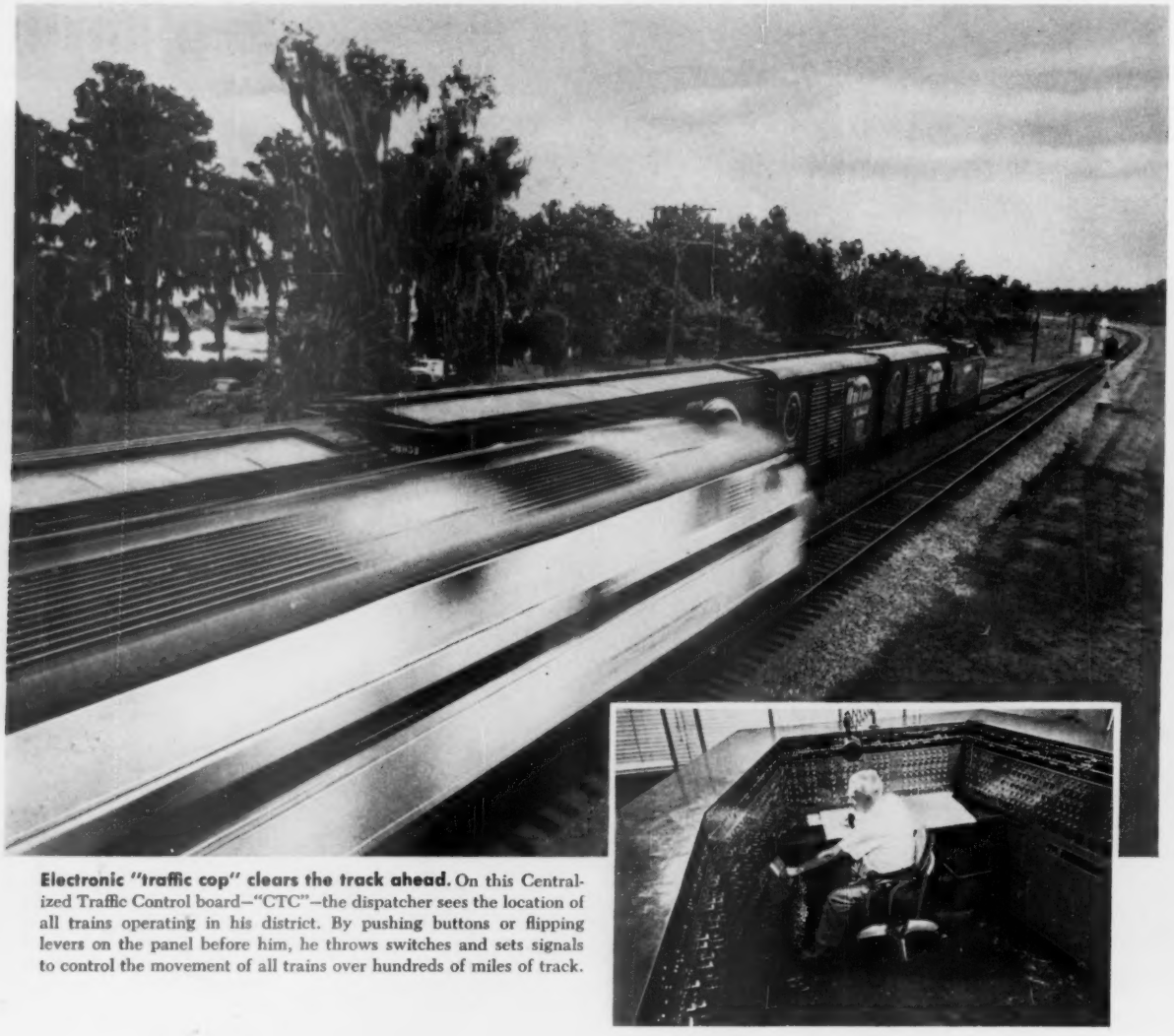
This situation has a lot of people worried. It should.

Just a short time ago, Major General E. C. R. Lasher warned of the danger in boasting that fewer cars and fewer locomotives are needed to handle the same load. This may be technological progress, it may reduce costs, but what if war comes and the load is not the *same* at all but one even greater than in World War II?

"With the dependence our military establishment has had to place on the railroads in past national emergencies," he said, "is it any wonder we view the future with apprehension?"

Other military leaders echo this note. Three weeks ago in Washington, General C. L. Bolte (ret.) took as text for a speech his "firm conviction . . . that railroads, in this country and overseas, are the indispensable and vital sinews of major military operations, especially, and above all, in time of war." The general, who is now with ACF, said this country's shrinking railroad plant is a serious concern to everyone charged with mobilization planning. The amount of modern railroad rolling stock, for example, is not only failing to keep pace with an expanding economy but is actually falling behind.

The race for technological supremacy between the U.S. and Russia is going to continue as long as the world is divided into two ideological camps. A large share of the burden of keeping America strong —of eventually winning this footrace for survival—hinges on the strength of this country's transportation network. As the vital mass movers the railroads simply must be cut free of the clinging ivy of inequitable restrictions and allowed to compete and grow.



Electronic "traffic cop" clears the track ahead. On this Centralized Traffic Control board—"CTC"—the dispatcher sees the location of all trains operating in his district. By pushing buttons or flipping levers on the panel before him, he throws switches and sets signals to control the movement of all trains over hundreds of miles of track.

More Railroad Progress like this depends on adequate earnings

Isn't this common sense?

Centralized Traffic Control is just one of the many improvements which help make the railroads far and away our most efficient form of mass transportation.

Railroads are constantly making such improvements – and will make many more as rapidly as they are able to earn the money to pay for them. But the earning power of railroads today is restricted by outdated public policies that favor competing forms of transportation.

This unequal treatment causes the public to lose some of the benefits of railroad progress—progress as important to the nation as it is to the railroads.

In the interests of all of us, the railroads should be permitted equal opportunity to earn an adequate return on the money invested in them. Then everyone would benefit – including *you*.

Isn't this common sense?

AMERICA MOVES AHEAD WITH THE RAILROADS

Association of American Railroads, Washington, D. C.

YOUR BASIC TRANSPORTATION

For the Northern Pacific

FOUR NO. 12s SPEED A 20-MILE RELOCATION JOB

The cost-cutting versatility of big CAT* No. 12 Motor Graders was demonstrated again on a 20-mile track relocation job on the Northern Pacific Railway near Trout Creek, Montana. Guy F. Atkinson Company, San Francisco, had four No. 12s at work!

ONE—The No. 12 pictured was grading a haul road to a gravel pit for five DW20s.

TWO—The second was grading for six DW20s and six D8s excavating a 1,300,000 cu. yd. cut.

THREE—The third was doing finished grading on the roadbed, covering 15 miles per day.

FOUR—The fourth was cutting a drainage ditch.

The No. 12 Motor Grader is one of the most useful off-track machines a railroad can own. It can shape embankment, eliminate irregular fills, control weeds and brush, police the yard, clean side ditches and clear snow.

It is built for heavy, round-the-clock work with its balanced design and dependable four-cycle Cat D318 Engine. Operators like the fast positive controls, easy blading positions and unobstructed visibility. Most tire down time is eliminated by tubeless tires. The exclusive oil clutch operates for many hundreds of hours without adjustment.

Your Caterpillar Dealer—who specializes in fast, efficient service and maintains a complete inventory of parts for you—is ready to demonstrate Cat Motor Graders on your job. Just give him a ring and name the date.

Caterpillar Tractor Co., Peoria, Illinois, U. S. A.

CATERPILLAR*

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WANTED—
THE HARD WORK

Here's Piggyback Lineup at a Glance

Atchison, Topeka & Santa Fe.—Plan 2; trailerload lots; special rates; 50 new cars approved for '58 construction, additional 40-ft trailers to be purchased.

Baltimore & Ohio.—Plan 2; operation between major on-line cities; trailerload lots; volume 475 trailers per month; further expansion under study.

Bessemer & Lake Erie.—Plan 2; trailerload lots; avg. mo. vol. 92 trailers, monthly gross $9,000.

Boston & Maine.—Plan 1 and Plan 2; trailerload and LTL (Plan 1 only) lots; avg. mo. vol. 459 trailers; Plan 1 trailers carried on rate divisions; Plan 2 trailers receive $3.25 per diem; TOFC investment $85,000; in '58 to convert flats for TOFC using ACF hitch, extending Plan 2 to WTL territory.

Canadian National.—Plan 2 and Plan 1; trailerload and rail LCL lots; avg. mo. vol. under Plan 2, 950 trailers; Plan 1 at variable flat rate on weight; contract carrier trailers get per diem.

Canadian Pacific.—Three separate TOFC operations; Plan 2 service between Montreal and Windsor for trailerload, LTL and rail LCL lots; Plan 1 between Montreal and Toronto; rail service at truck billing through subsidiary truck line in western Canada; Plan 1 service at a flat rate for lading only; avg. mo. vol. 3,608 tons, avg. gross $55,133.

Central of New Jersey.—Plan 2 as B&O connection; equipment leased from B&O; Jersey Central perfecting arrangements with LV and DL&W for establishing piggyback between certain JCL points and points served by DL&W and LV.

Chicago & Eastern Illinois.—Plan 1 and Plan 2; trailerload and rail LCL lots; avg. mo. vol. 675 trailers; rate allowance for shipper's trailers; total investment in TOFC $500,000; planned '58 program includes 12-15 new trailers, 6-10 new cars and new loading facilities at Evansville.

Chicago & North Western.—Plan 1 and Plan 2; trailerload lots; common carrier trailers at flat charge; no per diem for shipper's trailers.

Chicago, Burlington & Quincy.—Common carrier service owned subsidiary only; also Plan 2; common carrier movements at flat rate; avg. mo. vol. (both plans) 1,292 trailers, mo. gr. rev. $220,000; trailerloads, LTL and LCL handled systemwide; TOFC investment $750,000; '58 program, increased ownership of trailers and flat cars.

Chicago Great Western.—Plan 1; trailerload lots; flat charge per trailer, considered as division of through rate.

Chicago, Rock Island & Pacific.—Plan 1, trailerload lots on divisions over entire system; avg. mo. vol. 10 trailers; service is still new.

Delaware, Lackawanna & Western.—Plan 2 (some private or contract truck movements); trailerload, LTL and rail LCL; avg. mo. vol. 1,200 trailers, increasing steadily; tariff provision for shipper's own trailers; TOFC investment $2,000,000.

Erie.—Plan 1 between New England and Chicago and Plan 2; trailerload lots; Plan 2 avg. mo. vol. 400 trailers; mo. gr. $100,000; rate allowance for shipper's trailers; Plan 1 trailers at flat rate; TOFC investment $1,262,000; equipment due for expansion in '58.

Florida East Coast.—Plan 1, trailerload lots; flat rate per trailer; avg. mo. vol. 10 cars.

Great Northern.—Plan 2, trailerload and rail LCL lots; avg. mo. vol. 780 trailers; allowance for shipper's trailers on rental provided by tariff; TOFC investment $675,000; service will be expanded in '58.

Illinois Central.— Plan 2 trailerload lots; expansion includes flat cars and trailers and routes to interline points.

Kansas City Southern.—Plan 1 and Plan 2; avg. mo. vol. 286 trailers; mo. gr. $53,000; Plan 1 trailers move on divisions; Plan 2 trailers get per diem adjustment; TOFC investment $1,000,000.

Lehigh & Hudson River.—Service as New Haven connection; trailerloads, rail billing.

Lehigh Valley.—Plan 2, trailerload lots, avg. mo. vol. 130 trailers; largely through service; '57 business increased 129% over '56, similar increase expected in '58.

Long Island.—Plan 2; trailerloads only; all substituted service by truck delivered to LV and PRR in New Jersey.

Louisville & Nashville.—Plan 2, trailerload lots; '58 expansion may include additional stations and routes.

Minneapolis & St. Louis.—Plan 2, although Plan 1 tariffs have been filed; trailerload lots; avg. mo. rev. $4,000; '58 expansion plans include additional on-line ramps.

Missouri-Kansas-Texas.—Plan 1 and 2; trailerload and some rail LCL; avg. mo. vol. 800 trailers, mo. gr. $150,000; Plan 1 trailers at flat rate, legally a division of the through rate; TOFC car utilization is 10 times higher than other cars; TOFC investment $310,000; increased use of TTX and increased Plan 2 volume expected in '58.

Missouri Pacific.—Plan 2; trailerload shipments only; avg. mo. vol. 412; mo. rev. $66,000; TOFC investment $911,000 for ramps, etc., and $1,608,000 for equipment.

Monon.—Plan 1 and Plan 2, plus some private truck business; avg. mo. vol. 400 trailers (great majority Plan 2); trailerload and some rail LCL lots; Plan 1 trailers handled on division of through rate; TOFC about 98% new business.

New York Central.—Flexi-Van operations scheduled to start early in '58 with 900 demountable vans, 150 special roller-bearing car units and 150 highway wheel and axle assemblies. Flexi-Van investment $8,000,000.

New York, Chicago & St. Louis.—Plan 2 trailerload and rail LCL lots; avg. mo. vol. 1,000 trailers; interchanges with other roads; expansion under study; 35 new trailers due for December delivery; additional cars to be converted.

New York, New Haven & Hartford.—Plans 1 and 2; trailerload and LTL; avg. mo. vol. 3,210 trailers; monthly gross $167,000; Plan 1 at flat rate; TOFC investment $3,314,000; two special TOFC trains daily each way Boston-Providence-New York.

New York, Susquehanna & Western.—Plan 2 with DL&W and Erie; avg. mo. vol. 10-15 trailers; trailerload lots.

Northern Pacific.—Plan 2; trailerload lots and rail LCL; avg. mo. vol. 4,750 tons, monthly gross $50,000; rate allowance for shipper's trailers; two terminals equipped for Clejan-type cars in '58; TOFC investment $110,000.

Pennsylvania.—Plans 1 and 2; trailerload, some rail LCL; Plan 1 avg. mo. vol. 4,500 trailers, gross revenue $800,000; Plan 2 avg. vol. 1,200, gross $300,000; common carrier rates based on weight for distance; expansion plans for interline direct service; additional cars scheduled for delivery; solid piggyback trains daily each way New York-Chicago and New York-St. Louis.

Pittsburgh & West Virginia.—Plan 2; trailerload lots; avg. mo. vol. 181 trailers; no rate allowance for shipper's trailers.

Reading.—Plan 2, trailerload and rail LCL lots; per diem for shipper's trailers; avg. mo. vol. 117; TOFC investment about $125,000; plans additional substituted service; cars and trailers to be purchased or leased.

St. Louis-San Francisco.—Plan 2; trailerload lots; avg. mo. vol. 121 trailers; monthly gross $19,000; TOFC investment $150,000.

St. Louis Southwestern.—Plan 2, with common carrier service also by truck subsidiary; trailerload lots, mileage rate; no allowance for shipper's trailers.

Soo Line.—Plan 2, trailerload and rail LCL lots; avg. mo. vol. 79 trailers, monthly gross $9,900; expanding in '58.

Southern Pacific.—Plan 2 and Plan 1 (former predominant); avg. mo. vol. 6,118 trailers, primarily trailerload and rail LCL lots; Plan 1 at flat rate depending on length; TOFC investment $8,500,000.

Spokane International.—Handles private or contract trucks; trailerload lots.

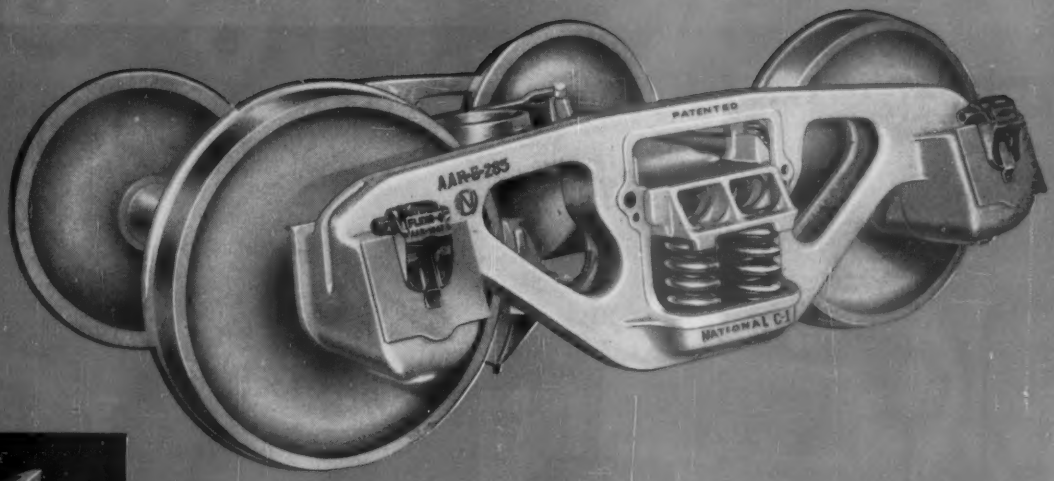
Texas & Pacific.—Plan 2; trailerload lots; avg. mo. vol. 181 trailers, monthly gross $19,000; TOFC investment $278,000; '58 plans for equipping 20 flat cars and purchasing 20 trailers.

Union Pacific.—Plan 2; handles transcontinental TOFC movements in interchange with eastern and west coast railroads.

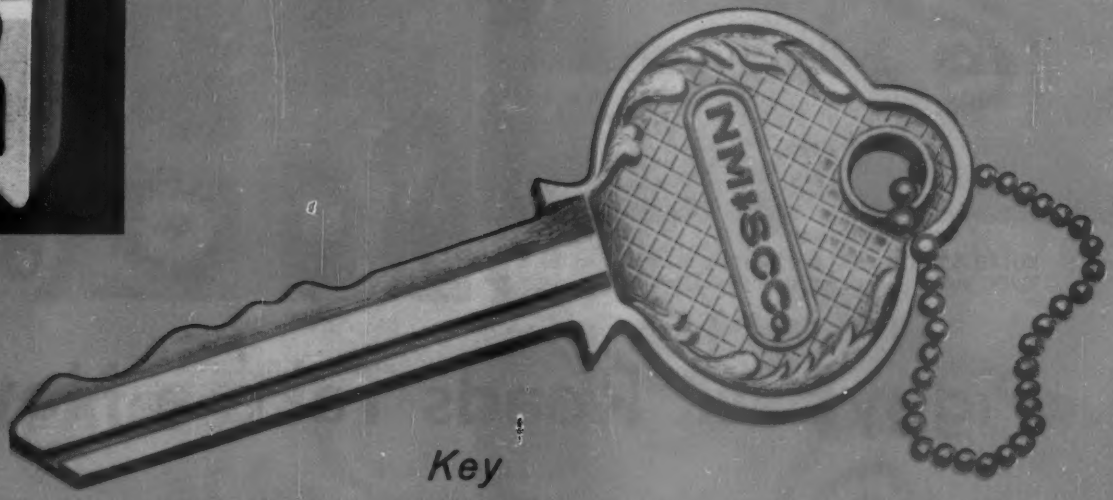
Wabash.—Plan 2; trailerload and some LCL avg. mo. vol. 1,460 trailers.

Western Maryland.— Plan 2; all in conjunction with PWV, NKP or Reading; trailerload lots; shippers trailers allowed $3.25 per diem: TOFC investment $184,701; trailer fleet increased in '57; to expand service in '58.

Western Pacific.—Plan 2; trailerload lots; shipper's trailers not handled; TOFC investment $275,000.



THE WEDGE



Key

to lower maintenance in

NATIONAL C-1 TRUCKS

In National C-1 Trucks, longer wedge life results from design of the friction mechanism itself, and the special analysis materials of which the wedge and wear plate are made.

Actual service records on leading railroads prove that National C-1 Truck Wedges are still in prime condition—even after traveling the equivalent of 8 times around the world.

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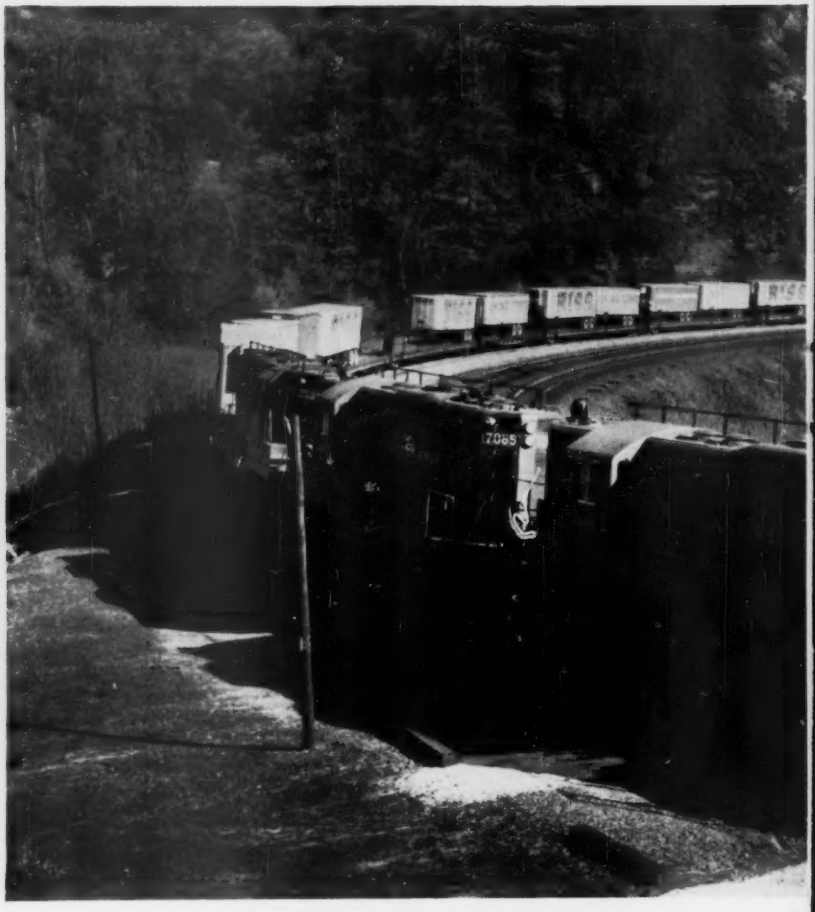
AA-6358

Special TOFC Report

DEMOUNTABLE TRAILER BODIES have won acceptance on MP-T&P. Modifications are under study.



SOLID TT TRAINS now are commonplace on PRR. TOFC volume continues its upward trend.

Piggyback Roads Take a New Look

When the history of piggybacking is written, 1957 probably will be best remembered for one event: the rediscovery of the container method of shipping freight.

Piggybacking itself has come of age, though not yet has it reached full stature. This year's developments in the handling of truck trailers on flat cars nearly all have been evolutionary in nature. TOFC volume has grown along predictable lines; technological progress has only improved existing methods.

But this year something new has been added: rail, highway, water and air transportation agencies are perhaps a tiny step closer to realizing that truly economical mass transportation means much more interagency cooperation. Piggybacking has helped show them this. Aware of the course they must pursue, they now realize that containers which can be interchanged freely among transport agencies—and which give shippers a big break, too—have possibilities never fully exploited.

A "Natural"—This Time?

This year, freight-haulers and their allies among users and suppliers, have set out to find the key to workable container systems.

This comment from a progressive western road perhaps sets the pace:

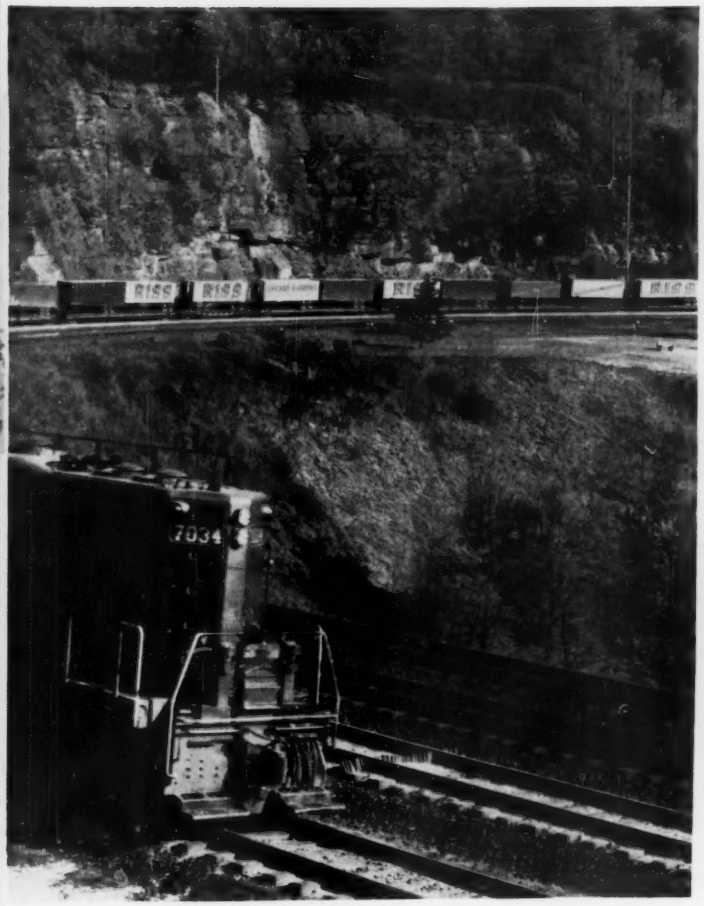
"It seems that, for once, the railroads are in an enviable position in the long-term container business. This stems from the fact that the marine industry needs containers that feature heavy loadings, but yet of a size that will fit through hatches (until special ships are built). The highway people are restricted as to dimensions and axle loadings. The rails are neatly in the middle; we can handle anything that a ship's gear can lift or the highways will tolerate."

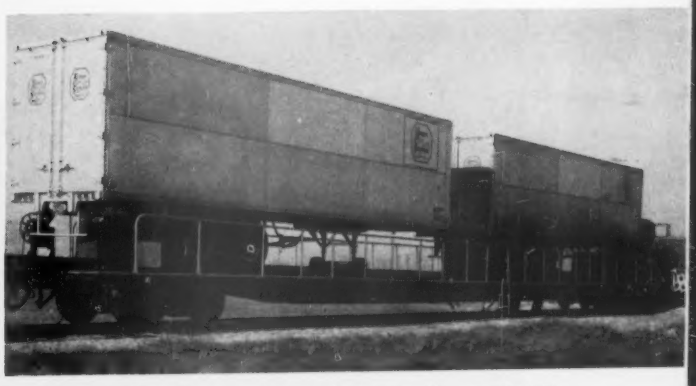
Other students point out that long-distance transportation by any method won't reach maximum economy until more of the principles of modern materials handling are applied—from consignor's factory to road-haul unit, and from road-haul unit to point of use. This means containers.

Containers such as are being discussed today are nothing particularly new to U.S. railroads. Demountable truck bodies or units which fit into gondola cars or onto flats have been in use—or have been forgotten—for years.

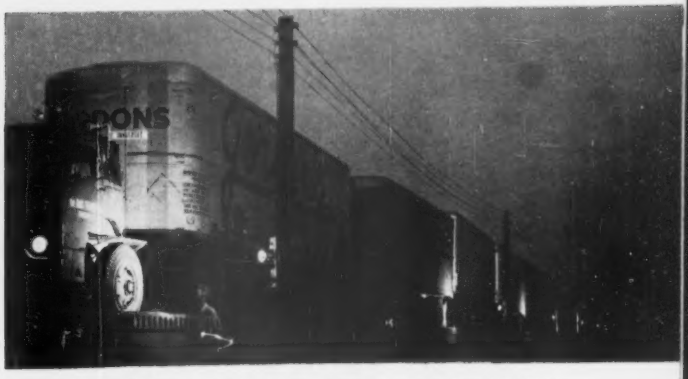
Currently, the Missouri Pacific is using demountable truck bodies extensively and is expressing satisfaction with the system. The Rock Island is revising its "Convert-A-Frate" operations for both traffic and mechanical reasons, but is far from turning thumbs-down on containers in principle.

The New York Central is about ready to go with its "Flexi-Van," essentially a piggyback container system, and railroads still are studying a container—introduced last July by Piggy-Back, Inc., Fruehauf and the Southern Pacific—which utilizes "Clejan-type" piggyback flat cars. Numerous other container systems are in various stages of development.





CENTER SILL CARS speed terminal operations on KCS.



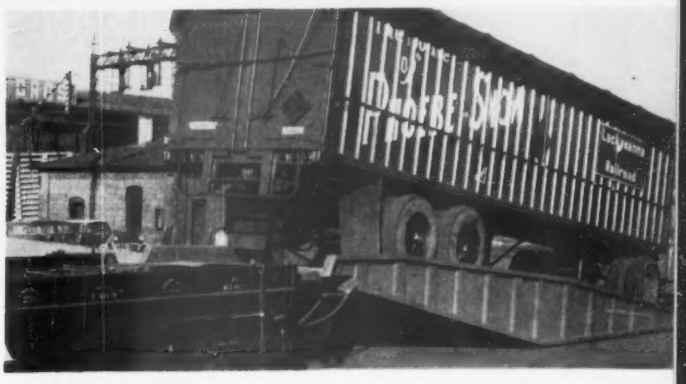
OVERNIGHT SERVICE is key sales point on the C&NW.

at Containers

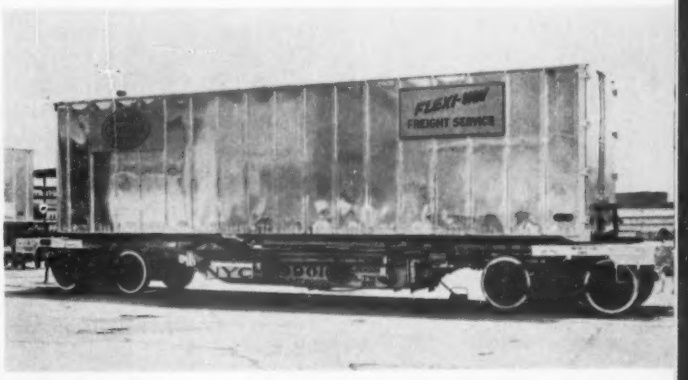
The new emphasis of the moment is being supplied in these ways:

- Pullman-Standard and Trailmobile this week disclosing "PAT," a piggyback container system which attains a new degree of versatility, especially in its compatability with ordinary TOFC operations. It approaches in novel fashion the problem of how to get the box on and off the car.
- At least one "study group" of parties interested in container systems has taken shape. A committee of rail, truck, air and ship lines, plus interested manufacturers, has set out to determine the basic technical and economic foundation upon which a workable container system should be based. The idea developed during work on a mutual project by Minnesota Mining & Manufacturing Co. and Electro-Motive Division of General Motors.
- The Piggy-Back container, a parallel development of the center-sill car, has already been tested on the SP; and attention is currently focused on how to solve interchange problems and balance loaded movements. Big asset of this equipment is its compatability with the Clejan car, and the fact that its ratio of payload to dead weight compares closely with a box car. Railroads, truck lines and ship lines all are interested in the development.

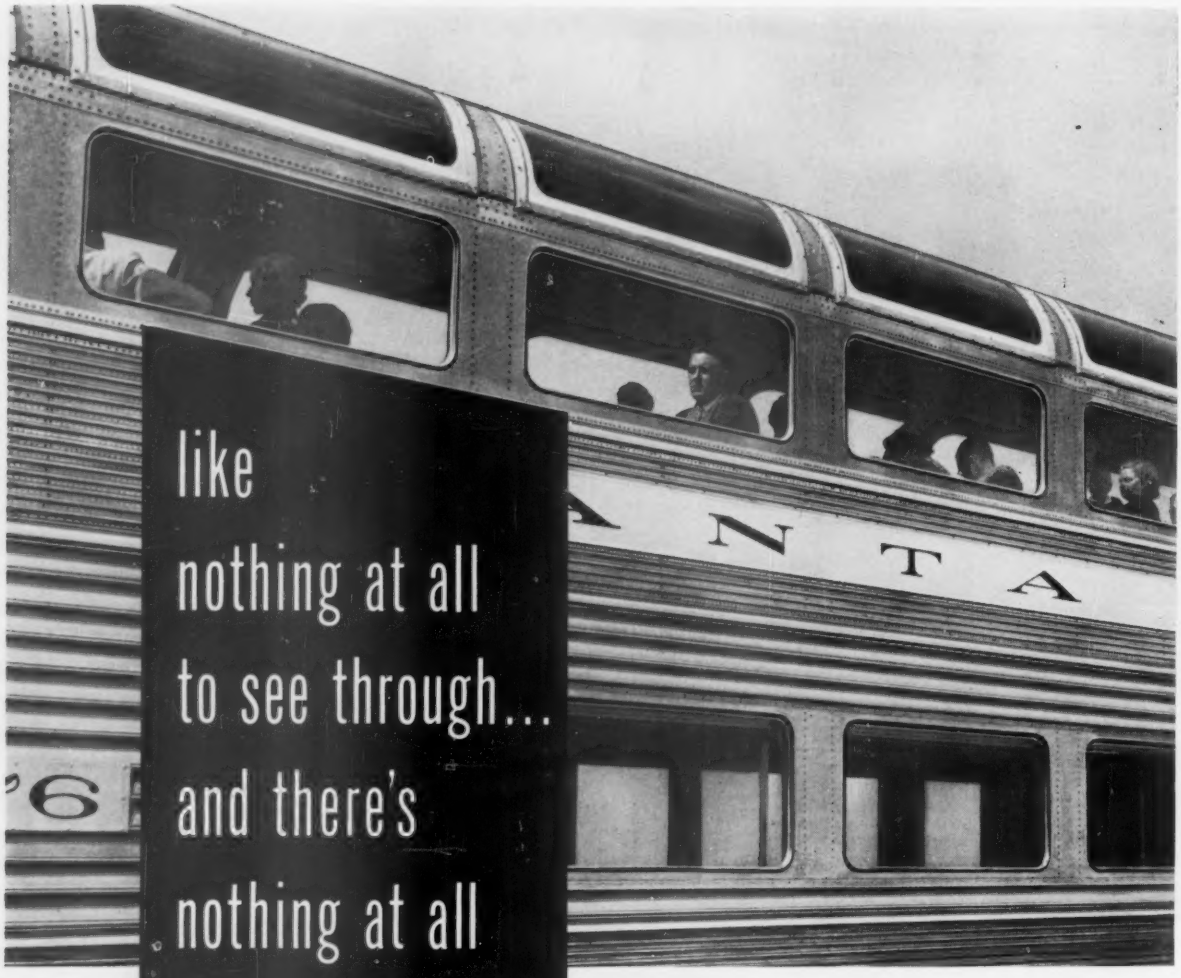
The hauling of highway trailers—wellspring of these developments—although commonplace on nearly half a hundred (*Continued on page 29*)



TIMED DELIVERIES, dependability, are a boon to users.



NEW ENTRY, NYC's Flexi-Van, goes in service soon.



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THE ADAMS & WESTLAKE CO.
100th ANNIVERSARY
1857-1957

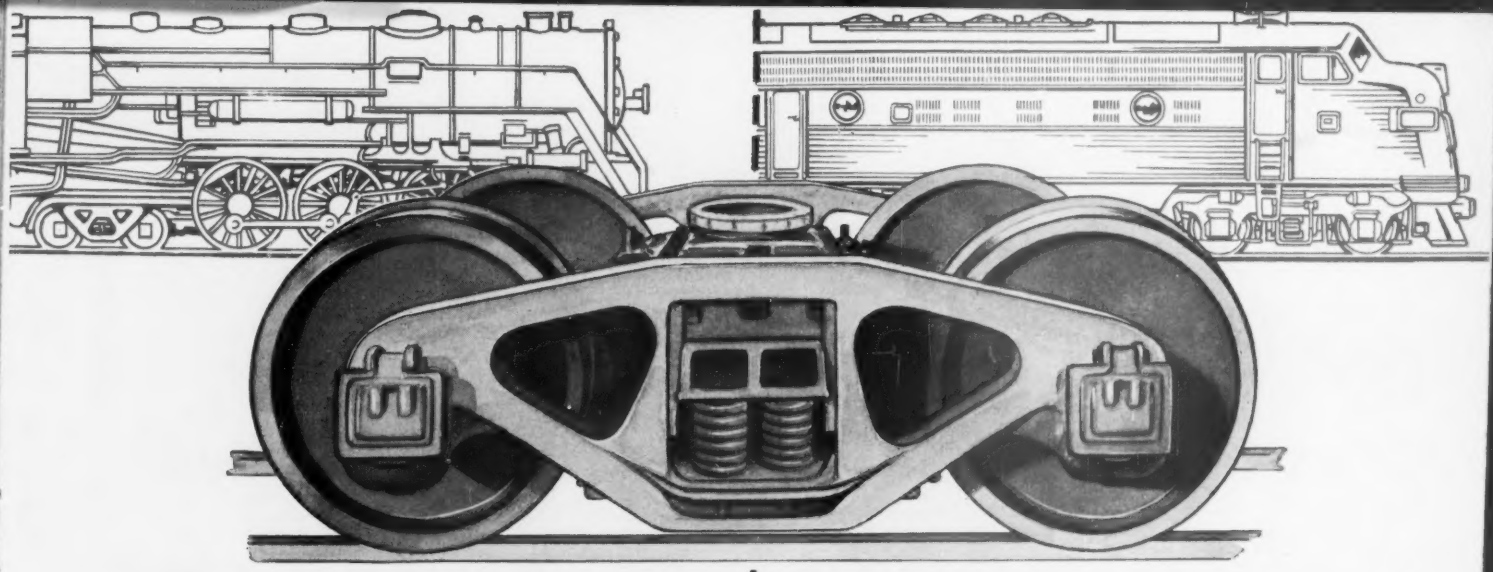
That's true—Adlake double-pane "Breather" windows stay crystal-clear regardless of temperature, altitude or humidity changes with *absolutely no maintenance whatever* except routine washing of the outer surfaces.

These windows stay clear because of the original Adlake "Breather" device—no dehydrants to change. Even if panes get broken you replace them on your own premises—no need to ship these windows to the factory.

Adlake

the original "Breather" Window

All major American railroads use Adlake "Breather" windows; some have been in uninterrupted service for 25 years. We'd like to give you all the details. THE ADAMS & WESTLAKE COMPANY, 1150 North Michigan, Elkhart, Indiana • New York • Chicago.



The Old and the New...

...from waste to → JBS ACME JOURNAL LUBRICATORS

A Great Step Forward!

With waste gradually being discontinued in journal lubrication, the change-over to a better type of lubricator raises certain questions: what type should it be; what qualities should it possess; what kind of a performance should be expected of it? To help you decide, consider what the JBS Acme Lubricator offers and compare it with any other lubricator. JBS Acme alone has the exclusive all-wool quilted core* which retains many times its own weight in oil reserve. Heavy chenille loop pile surfaces assure an ample supply of filtered oil at all times. JBS Acme Lubricators are unaffected by temperature changes and wick AAR specification car oil even at 45° below zero in road service tests. JBS Acme Lubricators require no modification of the standard journal box, are designed to hold their position in the box, and assure better performance with less servicing.

Write Today for Detailed Information and Folder

- ★ Retains oil up to 4 times its own weight
- ★ Requires no modification of journal box
- ★ Wicks AAR specification car oil even in coldest weather
- ★ Assures better performance with less servicing
- ★ Has exclusive all-wool quilted core*
- ★ Reinforced for extra wear
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GUARANTEED Quality, Workmanship and Material as represented

*Patent applied for

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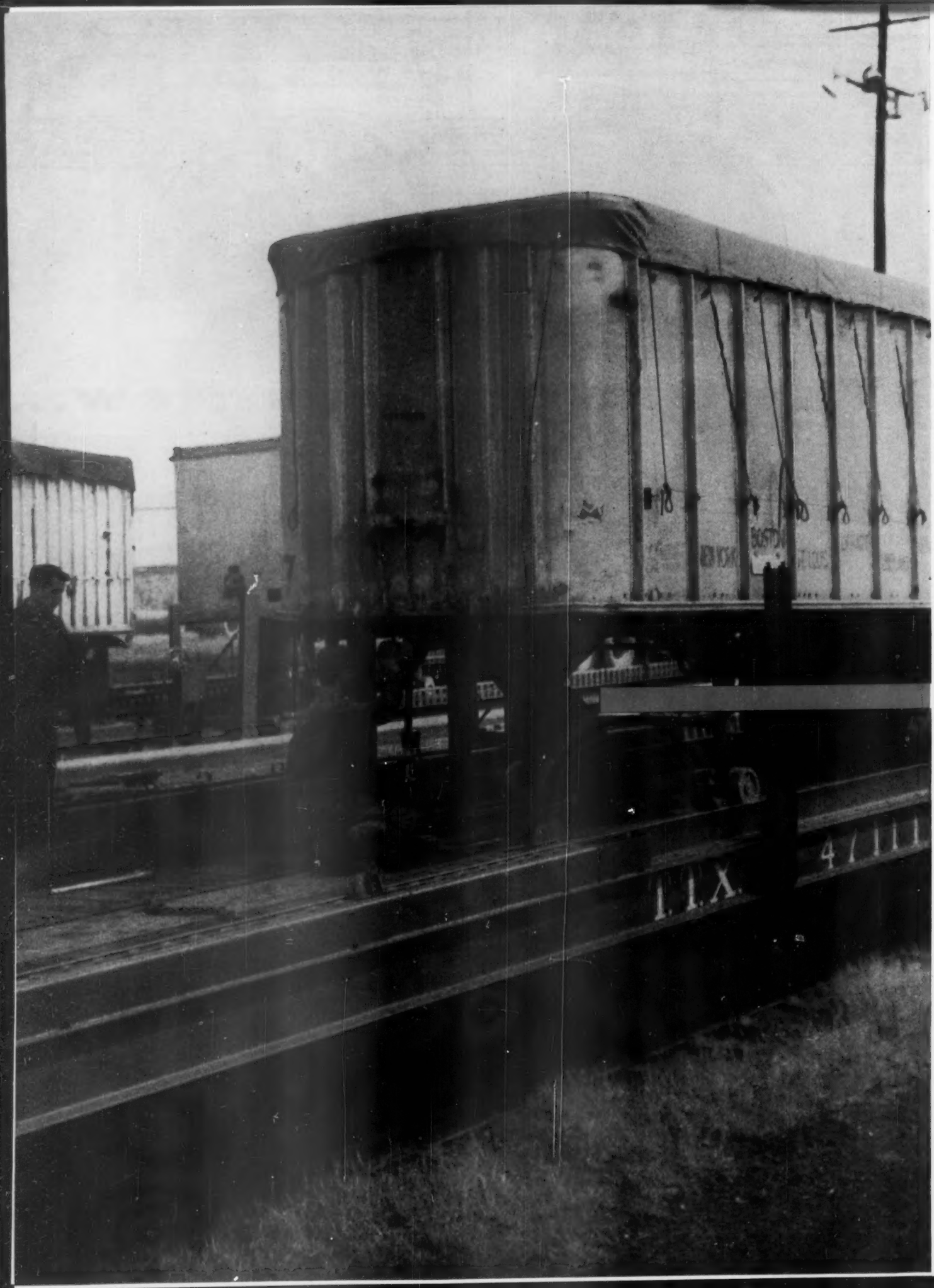
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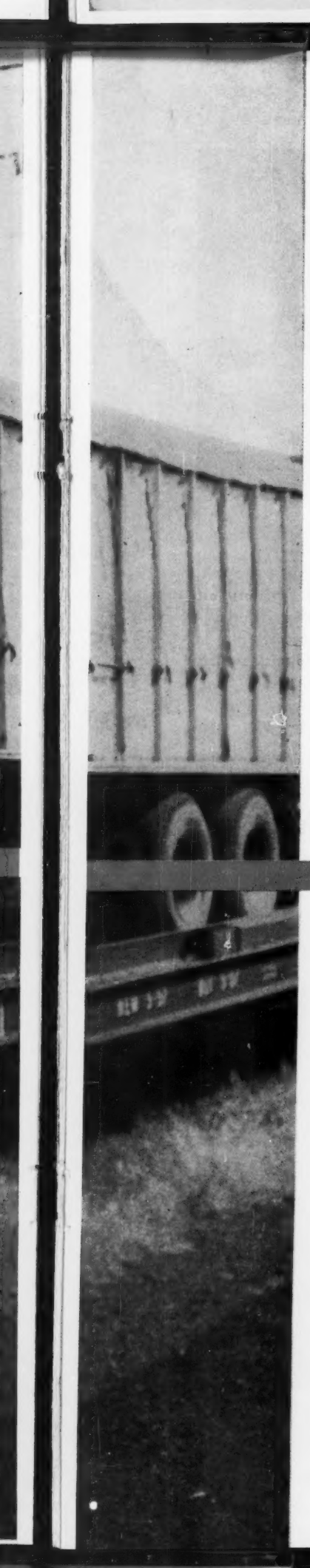
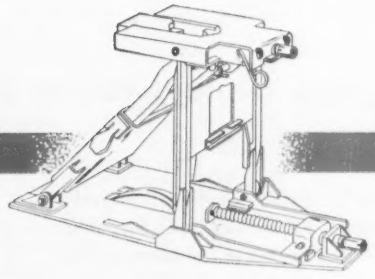


Trailer Train has ordered 1200 acf Trailer Hitches- 1000 are already in service

"The acf Retractable Trailer Hitch is a very practical solution to the problem of securing a trailer on a flat car. We are pleased with the savings and other benefits which have been effected since its installation. 1000 are in service and 200 additional hitches are being applied to our new cars this Fall".

TRAILER TRAIN COMPANY



One man raises and locks the acf Retractable Trailer Hitch in less than 3 minutes, using only a portable power wrench. Hitch ties down *securely*, protects trailer and lading with 40,000 foot pounds of cushioning. Hitch retracts to a height of 8 inches for fast, simple loading and unloading. *Fast, safe operation*—that's why the Trailer Train Company is sold on acf Retractable Trailer Hitches!

It's available now for installation on acf flat cars or your present equipment. See your acf representative about the possibility of testing several acf Retractable Trailer Hitches in your own operation—as many companies are now doing. For complete design details, specifications, price and delivery, get in touch with your nearest acf office.

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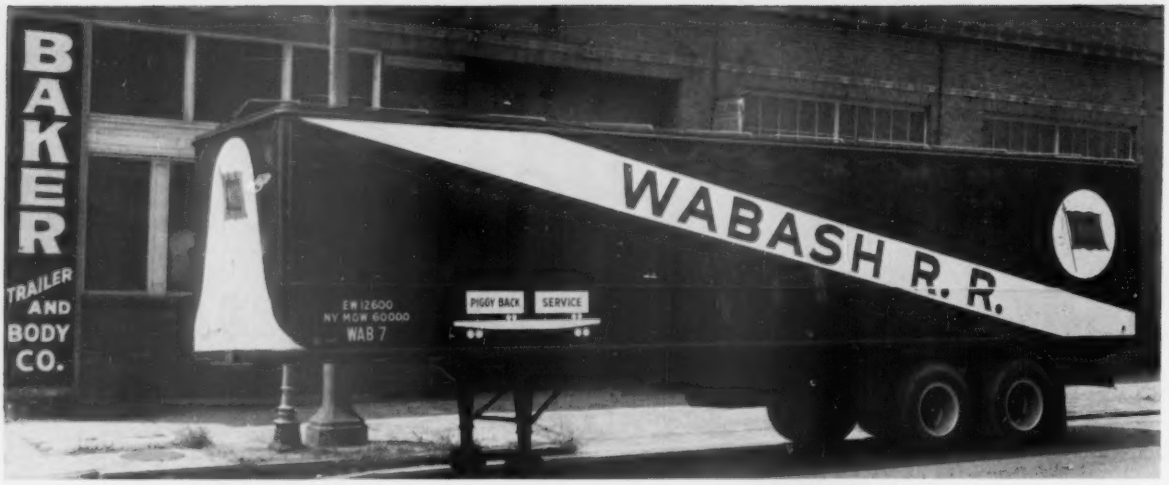
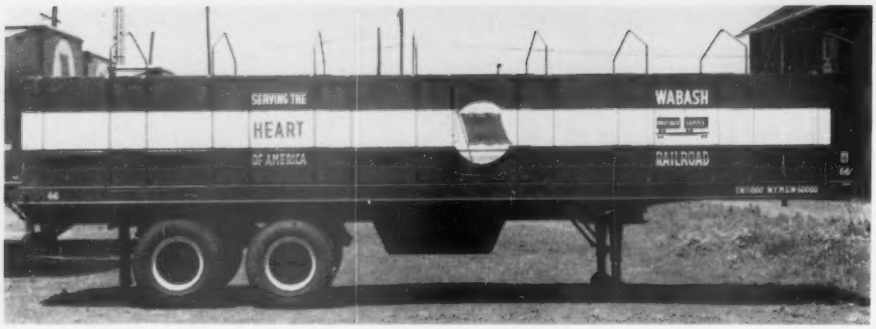




BAKER-built trailers are specially designed for rugged, all-weather use in railroad piggyback service.

These rugged trailers move piggyback lading safely

Any commodity can be guaranteed "safe arrival" via piggyback transport in trailers built for hard usage. BAKER-built trailers have the constructive features to withstand end-lash, impact, and oscillation. Study these features:

- "Skins" of 18-gauge steel
- Square inside corners for efficient and safe loading
- Full lining of quarter-inch plywood
- Doors backed with "bullplanks" to avert load shifting
- Shiplapped 1⅜ in. oak flooring
- Double throw-off rails
- Four-hinge doors
- Five-post front-end reinforcement
- Four horizontal cross braces
- Full underframes

BAKER Trailer and Body Co.

700 North 20th Street, St. Louis 3, Missouri

(*Continued from page 23*)

railroads, is still far from an exact science. By and large, its techniques vary with its individual practitioners. Its true costs, particularly those classed as "overhead," generally remain something of a mystery.

But as 1957 draws to a close, this much can be said:

- TOFC volume definitely is on the way up. Though complete figures are difficult to come by, a good estimate of this year's total trailer volume would be 300,000.
- The controversy over whether to handle railroads' trailers or truckers' remains, though softened in some quarters. "Plan 1" (common-carrier) piggyback can claim some new supporters; even one of the strongest "Plan 2" (all-rail) advocates—the Santa Fe—is saying that it may ultimately be forced to take a second look.
- The ringing battle-cry of many "piggybackers" is "standardize!" Some progress is being made. Prompted by a large-scale broadening of interchange agreements, mechanical and car-service rules are gradually taking shape. ACF's collapsible tie-down stanchion has earned wide acceptance. Trailer per diem is being set generally at $5 per day.

In the past year, piggybacking has taken a long step toward becoming a nationwide service. Interchange through such gateways as Chicago and St. Louis is commonplace. Plan 1 haulers such as the Pennsylvania and Chicago & North Western are working on interchange agreements. Tariffs exist for transcontinental moves, but as yet little traffic has developed. Some gaps remain to be filled in important transcontinental routes.

Opinions Differ

Official—and unofficial—attitudes about piggyback still range from hot to cold. The Burlington reports that it's "finding new traffic every day." The Frisco, on the other hand, regards piggyback success as box-car failure, and sets out to determine the reason. The Western Pacific is "getting its feet wet" in the business, and is unofficially regarded as a prime promoter of transcontinental tariffs. The Reading is forced to pass up lucrative business—especially to the Southwest—because its cars are gone for three weeks instead of the usual one.

Fourteen roads—including this year the two major Canadian lines, the Southern Pacific and the Chicago & North Western—are hauling trailers of motor common carriers. To this list can now be added the Minneapolis & St. Louis. Definite overtures in the direction of private and contract truckers are being made by a number of roads, including the Burlington and Frisco.

The Rock Island is dickering with Pacific Intermountain Express and Consolidated Freightways on hauls from Denver to Chicago, St. Louis and Kansas City. The Katy has established an incentive rate for motor common carriers, and the Pennsylvania probably will install one soon. At stake, some observers feel, may be a big new volume of business, since the rates will take into consideration trailer volume as well as weight.

One apprehension which bothered piggybackers at first apparently has been discarded by many: the possibility of diversion of freight from box cars to piggyback trailers. None of the TOFC operators interviewed by Railway Age regarded diversion as an important factor; several commented that anything "divertable" probably went to the common-carrier truckers long ago.

Likewise, Plan 1 piggybackers are finding that good service will prompt truck-line operators to "think piggyback" and send more trailers up the ramps than were first thought possible. Riss & Co., for instance, has been known to piggyback 75% of its business on certain routes. A piggyback-minded trucker can keep the drivers' "board" trimmed short and his fleet of tractors down to a minimum. He can use his drivers on runs for which no piggyback service is available. Result: more trailers for the railroads. As yet, the teamsters' union hasn't moved in seriously on piggyback operations.

PIGGYBACK BOOM continues on SP. This road will handle an estimated 75,000 units in 1957.

Longer Trailers, Shorter Cars

The increasing number of states permitting longer tractor-trailer rigs is having a definite effect on piggyback equipment. Two of today's longer trailers won't fit on 75-ft flat cars, especially if they have nose-mounted refrigerating units. Hence, Trailer Train Company, piggybacking's largest car pool, is inquiring for 200 single-trailer flat cars. When the bids come in this month, they'll be for cars designed for handling one 45-ft trailer—cars built, incidentally, to piggyback standards, not to those of general service flats. Weight and cost will reflect the requirements of the limited service to which they'll be put.

On the other hand, the piggyback flat car may not have reached its maximum length. One western line, a conservative Plan 2 piggybacker, is planning to build 50 two-trailer cars which may be as long as 85 ft.

The Southern Pacific is expanding its use of its 150 home-made "Clejan-type" flats by means of an interchange with the Northern Pacific. The NP will build ramps to suit "Clejan-type" operations at Seattle and Tacoma next year; SP will provide cars and trailers and NP will provide tractors for a limited interchange service. The NP meanwhile has been studying Plan 1 piggyback seriously.

Containers: So-So and Success

And a good many railroads, feeling the trend of the times, have watched with interest the container operations of the Rock Island and Missouri Pacific. The Rock Island's has had its problems; the Missouri Pacific's has been successful to the point that the road is experimenting with new types of special equipment. Special types of demountable bodies—including a demountable flat bed—are under experiment. And running between Kansas City and St. Louis is a special flat car equipped with a cradle into which the truck body fits so that all shocks are absorbed by springs.

To be sure, the Missouri Pacific has augmented its container service with conventional trailer piggyback, but within the framework of Missouri Pacific-Texas & Pacific requirements the containers have done a good job, the road reports. A ratio of two bodies to one chassis has kept equipment investment down; there are no clearance problems; and the road's requirements for TTX flat cars has been kept at a minimum.

HEAVY BRAKING ON LONG GRADES UPPED WHEEL DEFECTS, SO

Now the UP Mainliners Use

By January 1, 1958, the Union Pacific will have almost 100 per cent of its modern main-line passenger cars equipped with Budd disc brakes. With 385 cars now equipped, a few cafe-lounge and baggage cars are all that remain. Present applications include five sets of equipment for the "City of Portland," "City of Los Angeles," "City of San Francisco" and the "Challenger"; six sets of equipment for the "City of St. Louis" and two sets for the "City of Denver," a total of 28 trains with an average of 14 cars per train.

Delivery is presently being taken of 50 head-end baggage cars, built by ACF, equipped with General Steel Castings Corporation's 6 in. by 11 in. outside swing hanger trucks and having the latest design (TFM) disc brakes. Present conversions consist of 29 cars, built in 1941. Twelve of these cars will be equipped with outside swing hanger trucks and disc brakes this year.

The disc brake story began on the UP in 1948, with a decision to apply them to 100 cars, 50 Budd-built sleepers and 50 Pullman-Standard chair cars. This decision was based on the railroad's primary objective, to get rid of thermal cracked wheels.

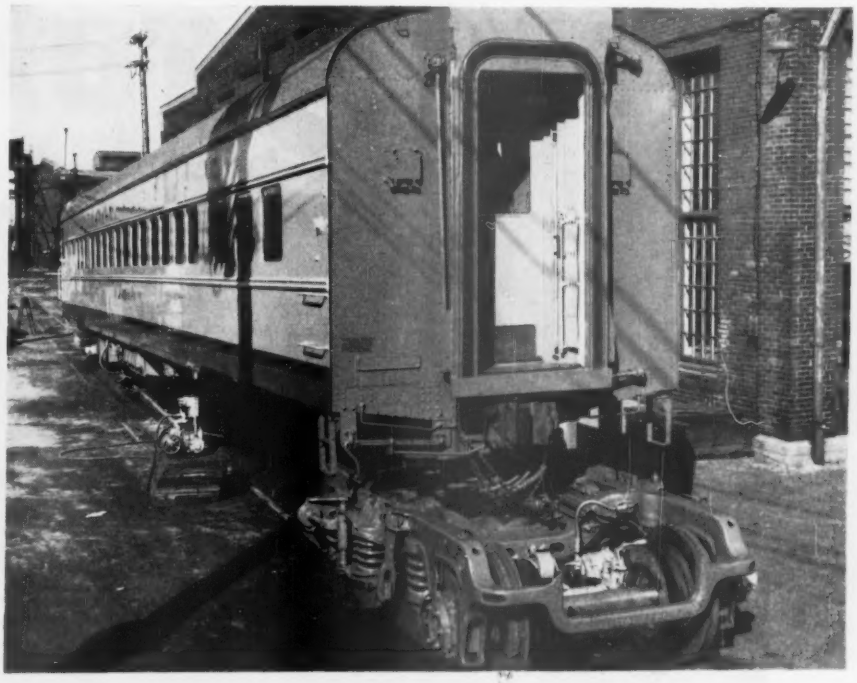
Heavy braking grades, prevalent on the UP and other western railroads, in combination with lightweight equipment and clasp brakes, were producing these defects in increasing numbers. Records showed this thermal damage to be a safety hazard. Mileages per wheel turning under 50,000 were quite common. Brake shoe life was about 4,600 miles, i.e., one round trip between Chicago and the West coast. In many instances, turned wheels exhibited thermal cracks after only one round trip. It was necessary to examine wheels for thermal cracks after each trip, and no brake shoe was allowed to leave the terminal with less than 1-in. wear remaining.

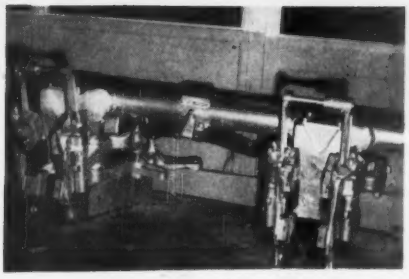
Today, the picture is quite different. Most trains are not braked on the wheel tread. The clasp brake has largely been eliminated and thermal cracked wheels are no longer a major operating problem. The UP is getting in excess of 200,000 miles before wheel turning, with 75,000-90,000 miles of individual brake shoe life.

In addition, the disc brake reportedly has cut down car noise, and practically eliminated snow and ice build-up in the trucks, since heat from the brake discs melts it. The truck overhaul period is 36 months, with one-third the labor involved, in comparison with 9 and 18 months on two other types of trucks.

In tests made in 1951, two pairs of wheels on the clasp-braked car "Figueroa" operating in the "City of Los Angeles" made thirteen round trips between Chicago and Los Angeles for a total of 59,800 miles before being removed for 6/32 in. tread wear. One pair of wheels on disc-braked car "Pacific Island" made 23 round trips for a total of 105,800 miles before removal for 6/32-in. tread wear. Another pair of wheels operated 110,400 miles and showed only 3/32-in. tread wear. The

THE "CHALLENGER" coming down from Caliente, Nev., where the line drops 2,726 feet in 75 miles. Here the disc brake proved its worth.



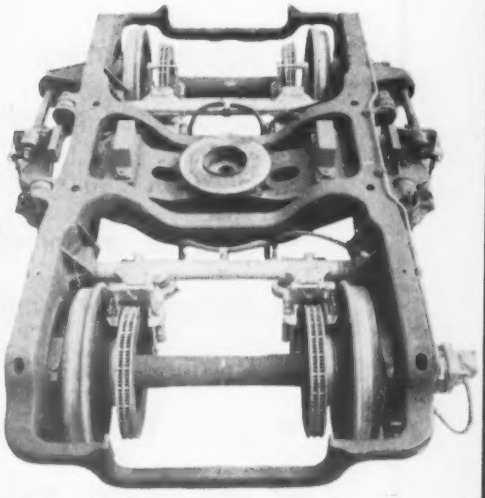


CF DESIGN brake equipped truck (above) ready for application to UP coach.

TFM BRAKE ASSEMBLY (left). C frame supports are not needed at ends of brake tube and center support to truck transom.

SAFETY HOOK (lower left) welded to end of brake frame tube overhangs equalizer, CF design.

NEW DESIGN (below) TFM disc brake applied to General Steel Casting outside swing hanger truck. Brake frame tube is positioned in cast integral recess in truck frame.



Disc Brakes

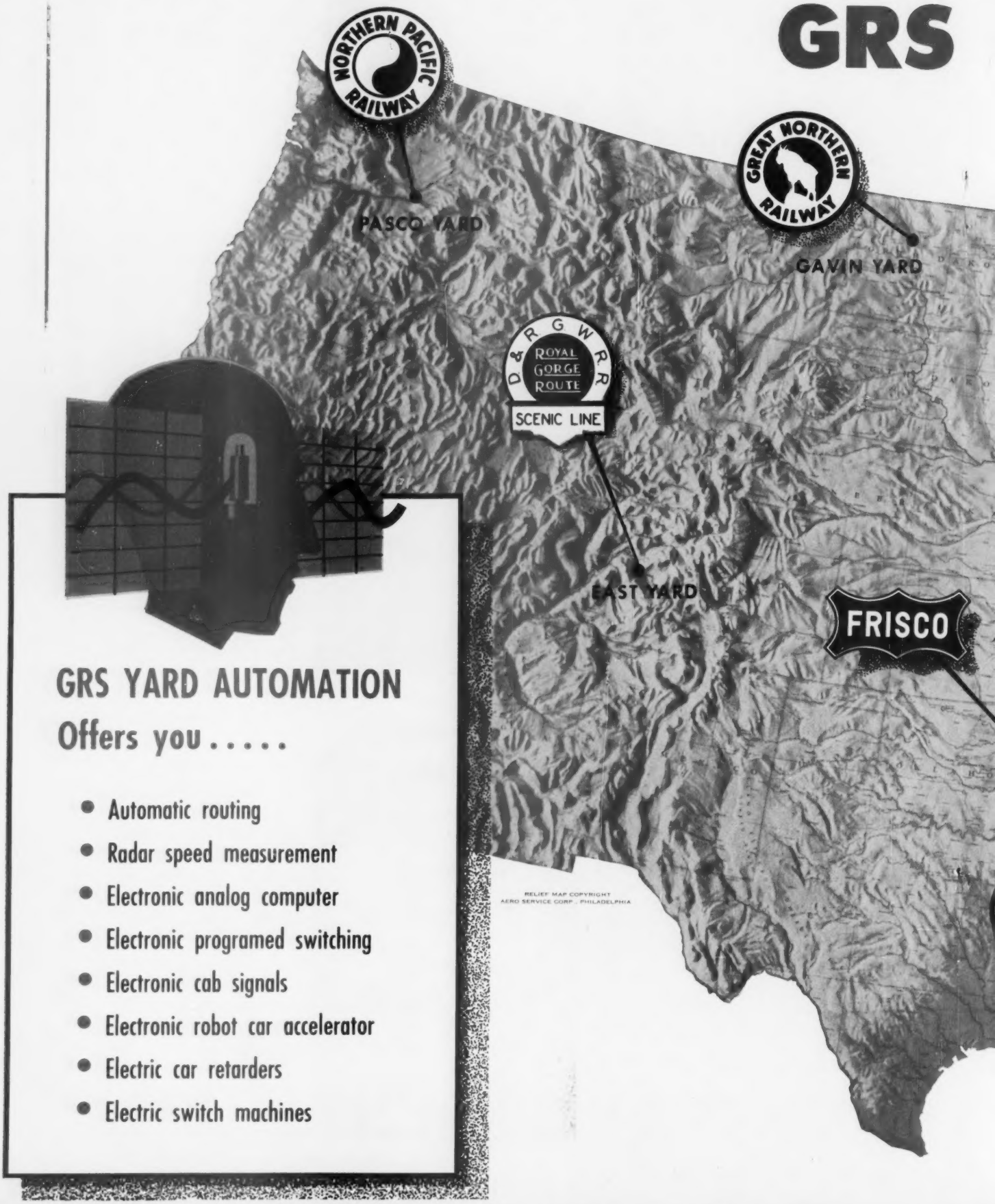
disc-brake equipped car "Pacific Bridge" operating in the same service had one pair of wheels removed at 102,000 miles for 6/32-in. tread wear and two pairs at 113,800 miles for 6/32-in. tread wear. Another pair, inspected at 127,600 miles, revealed only 3/32-in. tread wear.

When the first 100 cars were placed in service, they were mixed in with other cars equipped with the clasp brake. After the operating advantages became apparent, new cars and conversions were combined into 100 per cent disc-braked trains. The UP found little or no difference in train handling, including winter operations, between trains so equipped and those with the mixed consist. It was generally found that the all-disc-braked trains eliminated undesirable jolting and rough stops.

Further advantage included the elimination of slack adjusters, and the necessity of incorporating speed governor control, thus eliminating these additional (*Continued on page 36*)

these leading railroads

GRS



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and built it from experience

RAILROAD-MEN in their thinking . . . railroad-men in their doing, Morrison-men are quick to recognize what the railroad industry needs to help it operate and profit.

CAMPCARS by Morrison are the result of constant pulse-taking of a throbbing and vital industry. They fill an important need for supplying economical off-track housing for M/W crews. More important, Morrison's 30 year experience in building equipment for railroads has helped produce a CAMPCAR that's ruggedly built for long, hard use . . . commodiously designed to afford clean, sanitary living space . . . compactly constructed to house, feed and sustain from 2 to 50 men or more, completely independent of utilities or servicing, for a week or longer.

And railroads have found CAMPCAR savings so tremendous that many of the present users have liquidated their original cost in the first year of use.

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If Your Volume Is Small . . .

With the Piggy-Back Inc. Car—you make a substantial saving in line-haul transportation costs. You can load 2 of the largest trailers or 3 ordinary trailers onto a Piggy-Back Inc. car. Your ratio of payload to tare is unequaled.

Yet the 79'6" Piggy-Back Inc. car costs you only slightly more than a regular 40 ft. flat car. And then . . .

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You get additional profits from the dramatic savings of "*Guided Loading.*" Conventional loading and tie-down on a standard flat car takes 4 men about 24 man-minutes. But *Guided Loading*, loading and tying down a trailer onto a Piggy-Back Inc. car, takes one man only 1 and ½ minutes.

And did you know that this same car will handle our containers, designed for easier handling? So—if you're interested in either the car or the container just check the proper place in the coupon below and send the coupon back to us.

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Brake Shoe Costs on the "City of Los Angeles," Chicago-Los Angeles

Number of cars in consist (normal)	14
Round trips per year	73
Mileage per round trip	4,598
Annual car mileage	335,654
Brake shoe mileage:	
(a) Budd disc brake shoes	90,000
(b) Cast iron tread shoes	4,598
Number of car sets of shoe changes per car per year:	
(a) Budd disc brake shoes	3.73
(b) Cast iron tread shoes	72.96
Cost per car set of 16 shoes:	
(a) Budd—$8.64 by 16	$138.29
(b) Cast iron (including labor, overhead and allowing for scrap value)	
1. Standard—$2.99 by 16	$ 47.84
2. Long — 3.98 by 16	63.68

Comparison of Brake Material Required Per Car

Clasp Brake	Description	Disc Brake (CF)
4 (250 lb each)	Brake cylinders	8 (40 lb each)
16 (35 lb each)	Brake shoes	16 (14 lb each)
None	Brake discs	8
8	Brake beam	4 ("C" frames)
8	Brake beam stabilizer	None
24	Levers	16 (tongs)
84	Pins	48
20	Hangers	4
20	Support brackets	8
4	Slack adjuster	None
20	Pull rods	None
208	**Total number of major parts**	**112**
300 (minimum)	Bushings	158
Yes	Anti-wheel slide	Yes
Yes	Speed governor control	None
Yes	Spark shields	None

Comparative Yearly Costs—Budd disc brake shoes vs tread brake shoes

Type of Shoe	No. of changes per car/year	Cost per change/car	Cost per car/year	Cost per 14-car train/year
Standard C.I.	72.96	$ 47.84	$3,490.40	$48,865.60
Budd	3.73	138.29	515.82	7,221.48
Calculated savings by use of Budd disc brakes			2,974.58	41,644.12
Long C.I.	72.96	63.68	4,646.09	65,045.26
Budd	3.73	138.29	515.82	7,221.48
Calculated savings by use of Budd disc brakes			4,130.27	57,823.78

(*Continued from page 31*)
initial costs and continuing maintenance expenses. A large number of pins, bushings and levers were also eliminated. All moving parts on the disc brake are held under spring compression reducing wear caused by vibration.

One characteristic of Budd disc-braked cars examined carefully by the railroad was the signal-shunting ability as compared with cars equipped with tread brakes. These tests were run by the UP in December 1951, at Gilmore, Neb. This particular location was chosen because the tests could easily be conducted without interference from normal traffic and the rail surface would naturally be in slightly worse shape than the main line insofar as shunting sensitivity was concerned.

Four passenger cars were used; two equipped with disc brakes and two with clasp brakes. These cars were kicked through the track circuit so that the car being tested was the only car in the circuit. Readings obtained on a recording milliammeter indicated no difference in shunting efficiency between the two types tested. Other major railroads made similar tests confirming the UP's findings. None of them, including the UP, used wheel scrubbing devices.

The railroad found that the disc brake has the capacity under continuous braking to control a train of any length and on any grade without damage to the brake equipment. Also because the coefficient of friction of the materials used is constant for all loads and at all speeds, and because of the brake's ability to dissipate the heat generated, the train can be reliably stopped in a shorter distance. The pivoted and rubber-backed pin mounted shoes always present the maximum braking surface, and the brake is set to provide a constant free car deceleration of approximately 3 mph per sec in emergency.

Most of the UP cars are equipped with the Model CF disc brake, which is mounted on a three-point rubber supported frame. One point is attached to the truck center transom and the other two are supported by resting on the journal boxes. To enhance the safety characteristics of this assembly the UP developed a hook arrangement to be applied to 100 of its disc braked cars. This hook, a steel casting, is inserted in the end of the brake frame tube, positioned so that the hook is over fhe equalizer, and then welded in place. It also serves as a support for the brake assembly during wheel changes, and was adopted as standard.

Permission was given the Budd Company to use this safety device on brakes applied to other railroads having trucks with clearance suitable for its application.

The newer model TFM disc brake design, which is being applied to 55 new UP cars, 1 on the Wabash, and 15 existing GN cars, is already in service on 114 Milwaukee cars. It offers some deign variations as compared to Model CF. For example, it may be considered preferable for converting existing cars to disc brakes because it does not require modification to the journal boxes to provide the support required for the Model CF. Also, certain truck design elements, such as short wheel base or narrow journal centers, may limit clearances, requiring use of Model TFM. The fundamental disc brake principles are retained and with the exception of the method of attaching the brake assembly to the truck all other components are interchangeable between the TFM and the CF design. The latter will continue in production at Budd along with the newer development.

In 1948 an executive of the Union Pacific stated, when it was decided to apply disc brakes to 100 new cars for streamliner service, "After making a thorough study of this subject from all angles, we decided the advantages so far outweighed the disadvantages that it is simply a matter of good business to use the Budd disc brakes." With substantial operating and maintenance economies achieved in the last nine years covering conversion of the road's passenger fleet, it continues to be "a matter of good business." The Union Pacific likes the Budd disc brake.

FIRST TRAIN over new line. For the first month, eastbound traffic only was handled—westbound only the following month—to compact the roadbed prior to full-scale operation.

How the CNR Moved Over to . . .

Make Room for the Seaway

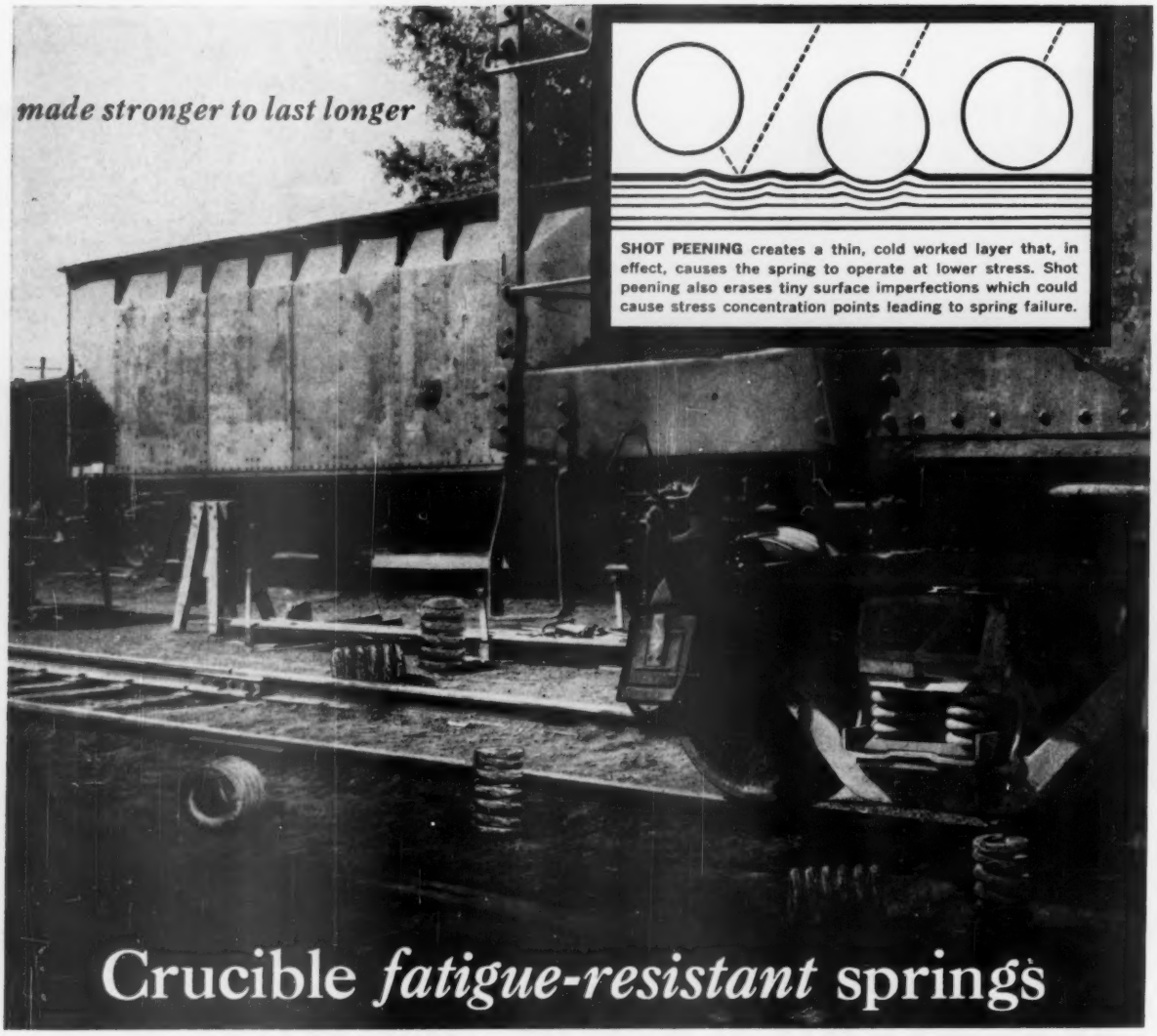
VICTORIA bridge span over the lower entrance to the St. Lambert lock will be replaced by elaborate lift spans and traffic diversion bridge.

Progress is defined as "movement forward." In the case, however, of the Canadian National and the "progress" of the St. Lawrence Seaway and power projects, *lateral* movement was involved, i.e., the relocation of some 40 miles of main-line double track. Here's how it all came about.

Hand in hand with the multi-million-dollar Seaway project, the Hydro-Electric Power Commission of Ontario is putting the finishing touches on a $600-million power project in the International Rapids region of the St. Lawrence river west of Montreal. Without this power project there would be no Seaway, since the dam construction involved creates the pool which makes the Seaway feasible. This same pool—formed by the dams and confined by an extensive arrangement of dikes—will, next summer, inundate whole townsites, highways and farms, and the aforementioned 40 miles of track. That is, it would, except for the fact that everything movable in the area—the railroad included—has been moved inland. Within 24 hours after the dam's sluice gates are opened, 10,000 acres of formerly dry land will be flooded.

Relocation of the railroad trackage—a part of the CNR's Cornwall subdivision—was begun early in the Seaway project

WHAT THE NEW LINE LOOKS LIKE P. 42 ►



help keep cars off the repair tracks

Three major railroads report: 90% of all car springs fail due to permanent set – only 10% due to other causes. You can reduce the frequency of failures by using Crucible's single heat treated *fatigue-resistant* springs. They're *made stronger to last longer*, yet cost no more than conventional springs.

Crucible *fatigue-resistant* springs are stronger because they're single heat treated and shot peened. These processes provide better hardenability, higher elastic limits and greater resistance to working stresses.

Help keep cars off the repair tracks and reduce "bad-order" car expenses by using Crucible *fatigue-resistant* springs. They're your best guarantee of long, low-cost spring service. For further details, write for folder: *Spring Division, Crucible Steel Company of America, McCandless Avenue, Pittsburgh 1, Pa.*

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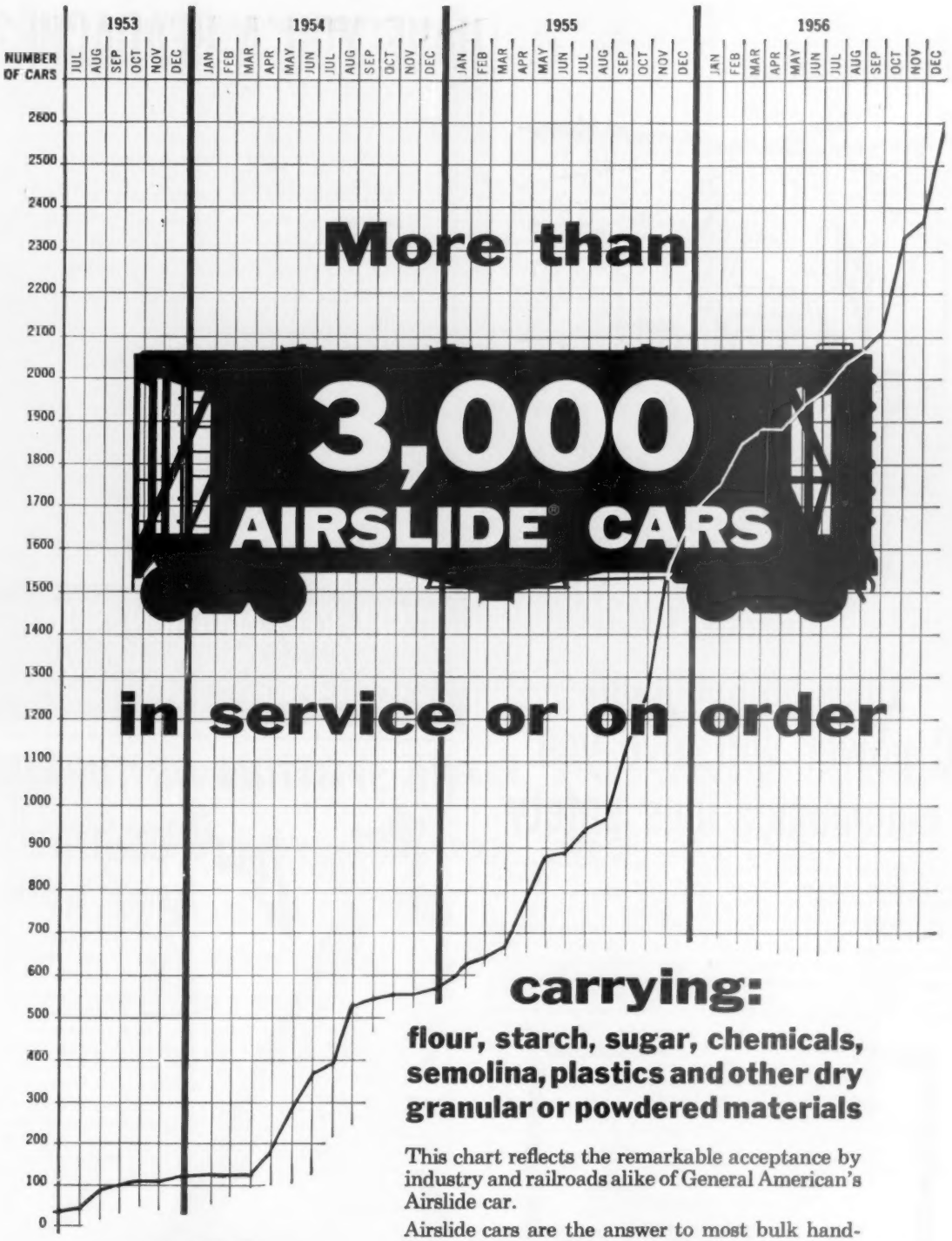

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This chart reflects the remarkable acceptance by industry and railroads alike of General American's Airslide car.

Airslide cars are the answer to most bulk handling problems. Contamination-free shipment, elimination of containers and associated costs mean additional profits—for you.

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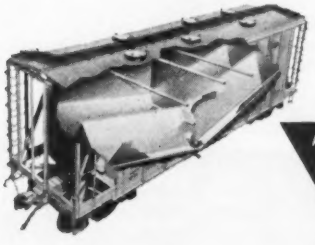

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This Bird Self-Sealing Tie Pad is removed for inspection after 5 years of service. Because of its tenacious seal, the pad had to be pried from the tie with an adze. Bird Self-Sealing Tie Pads maintain dimensional stability . . . cannot stretch or compress . . . provide a *constant unbroken seal.*

Proof of the Protection

Unretouched photograph of cross section of tie shows underplate area, including spike holes, after 10 years' protection by Bird Self-Sealing Tie Pad. There is no trace of the destructive effects of moisture and abrasion in these vulnerable areas. *Moisture and abrasive materials could not penetrate the seal.*

Effective Tie Pad Performance Depends on the Seal...

and you get Proof of the Seal with BIRD Self-Sealing Tie Pads

The performance of tie pads depends on the permanent and effective seal between the pad and the tie. Any tie pad that is not securely sealed to the tie simply provides a shelter for accumulated moisture and abrasive materials. These destructive agents cause the breakdown of the supporting power of the tie under the plate and the holding power of the spike wood.

Bird Self-Sealing Tie Pads are the *only* tie pads whose durable and effective seal with the tie has been proved through years of in-track service. Actual in-track installation also proves that Bird Self-Sealing Tie Pads increase tie life sufficiently to pay the cost of tie pads many times over. These savings represent a substantial reduction in track maintenance costs.

In your '58 budget plans, be sure to allow for Bird Self-Sealing Tie Pads. For an interesting booklet giving facts and figures on dollar savings, write to Bird Tie Pads, East Walpole, Massachusetts, Department HRA.

Bird Self-Sealing Tie Pads Are Recommended For:

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Insulated Joints • With Smaller Tie Plates
Pile Cutoffs • Through Station Platforms
Out-of-Face Installations in Rail-Laying
Programs • Sandy Locations
All other locations where tie life is
short or replacement costs are high.

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CORNWALL station is the largest of the five buildings constructed along the relocated line. It is located on a 200-ft. by 2,000-ft. site which provides ample parking facilities and driveways.

WATER TANK Cornwall was moved to new site by CNR forces and reconstructed adjacent to new station.

so as to clear the area for dike construction and other work. New stations, grade crossings, signaling, bridges and other facilities were all part of the move, the expense of which was assumed by the Hydro Commission.

The newly constructed main line, 0.6 miles longer than the old, is representative of the CNR's recently adopted standard for main-line construction. Rail is of 132-lb section, with passing and spur trackage of 100 lb. About 18,300 tons of 132-lb and 1,000 tons of 100-lb rail went into the line. The rail is laid on creosoted hardwood ties. Maximum grade is 0.5 per cent and maximum curvature is 1 deg. Grading of the new roadway presented no unusual problems to the contractors.

The ballast section, 24 in. in depth overall under the ties, represents the road's answer to frost heaving and the formation of the undesirable "W" section of compacted subgrade. A 6-in. layer of gravel was placed directly atop the subgrade and was, in turn, covered by an 18-in. layer of crushed stone. The track was given three raises—two by the contractor and the third by CNR forces after freight traffic had conditioned the track to the desired extent. The total ballast was some 411,000 cu yd.

Three 60-ft steel girder spans were constructed in conjunction with the new line and necessary steel water tanks were relocated by CNR forces.

The new line, as shown on the accompanying map, extends from a point east of Cornwall to a connection north of Cardinal —39.5 miles. It incorporates two 100-car sidings—one for each direction—at Morrisburg. Block signal installation and all pole, wire line, interlocking and grade crossing protection work was done by CNR forces. At Cornwall, an automatic approach control interlocking has been installed where the new line crosses a CPR single-track branch line.

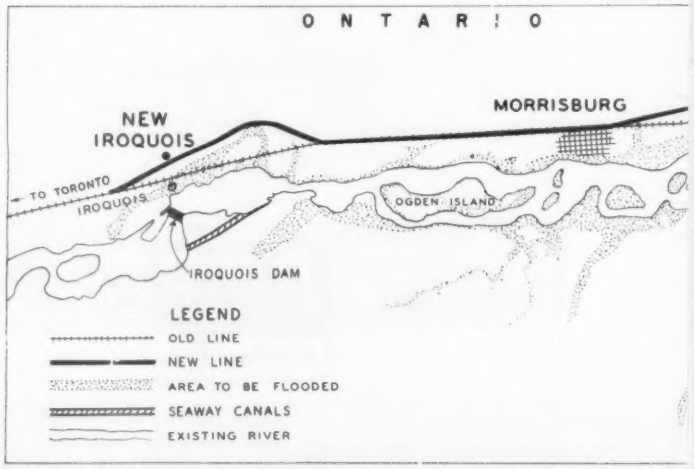
Most of the signal construction work was done during the winter. Before the ground froze, signal forces dug trenches for their underground wire and cable. Three-inch diameter fiber duct was installed under the tracks. Relay cases were wired completely in baggage cars fitted to serve as shop and storage cars. Plug-in relays were used exclusively in the cases which, after they were completely assembled, were placed on precast concrete foundations.

Signaling on the new line is for high-speed passenger and freight service and incorporates 8,000-ft blocks. Eight highway crossing protection installations were made. The signals were arranged having in mind the track circuits required for crossing protection so as to minimize the total number of circuits. This arrangement reduced the initial cost and makes signal maintenance easier.

A new pole line was erected with four crossarms—the top three for communication circuits and the lower one for signal circuits and signal power. The power line is a 220-volt a-c circuit commercially fed at seven locations along the line. Searchlight-type signals are used throughout for both block signals and the train order signals at Cornwall, Ingleside, Iroquois and Harrisburg.

Look-Alike Stations

Five new station buildings were constructed on the relocated line. These were built under contract and to the design and specifications of the CNR as prepared by the road's chief architect. A new station at Wales replaces the old stations at Wales and Farran's Point. Long Sault station replaces those at Mille Roches and Moulinette. Two other small stations have been built at



Victoria Bridge: Ups and Downs

At Montreal the first of two proposed Seaway locks is under construction right now. Directly above this lock, however, extends Victoria bridge which carries over one hundred trains and thousands of motor vehicles over the St. Lawrence river each day. And Victoria bridge is too low to permit passage of an ocean-going vessel through the lock beneath it.

The obvious solution is installation of a lift span in the bridge over the lock. But traffic can't be stopped for a bridge raising every time a ship passes through the locks. Well then, two lift spans—the second in a separate connecting bridge off to one side at the other end of the lock. "Sure, that'll work fine," someone will explain, "When the upper lock gate opens to let a ship in, bridge traffic will be diverted over the second bridge. Then, when the ship is about to leave the lock and the lower gates open, the second lift span will raise and traffic will be routed back over the first bridge."

So, there you have it—Victoria bridge going up and down in two parts while Seaway traffic flows through the lock.

But don't forget, there'll be two locks eventually, with more complications. At this point in a discussion, CNR officers are apt to sigh wearily and explain, "Well, we can always put up a second pair of lift spans over the second lock and then when lift-span No. 1 on bridge No. 2 is up and lift-span No. 2 on bridge No. 1 is up we can route railroad traffic over span No. 1 on bridge No. 1 and Span No. 2 on bridge No. 2 and then . . . well, you figure it out."

Iroquois and Morrisburg and a larger structure has been constructed at Cornwall.

The stations at Wales, Long Sault, Iroquois and Morrisburg are identical except that the latter two have somewhat more express area than the others. All are ranch style in appearance and have flat roofs with wide canopies on four sides. All are constructed on flat slab foundations, continuous except for depressed areas to accommodate the heating plants. Exteriors of the stations are of decorative brick and extensive use has been made of glass—from floor to ceiling—in the 20-ft by 26-ft waiting rooms. Windows are all framed in aluminum.

Wide, double-entry doors lead into waiting rooms which incorporate open ticket counters, parcel lockers and telephone booths. Express areas in the buildings are fully equipped with modern equipment designed to accommodate a continually growing volume of business.

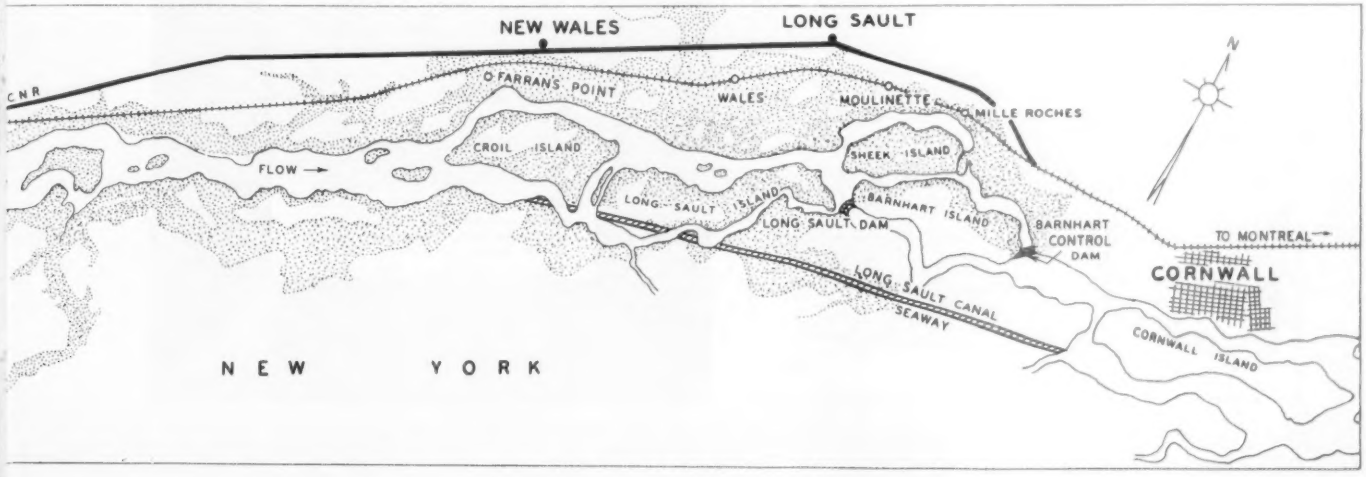
The Wales and Long Sault stations are 72 ft long and 22 ft wide and incorporate 20-ft by 27-ft express and baggage rooms with overhead doors. All stations have toilet facilities adjoining the waiting rooms and incorporate appropriate driveways and parking space.

The new station at Cornwall, 170 ft by 40 ft, is considerably larger than the others. It is situated on a 200-ft by 2,000-ft site which provides ample parking. The entrance drive to the station is divided by an island to separate inbound and outbound vehicle traffic.

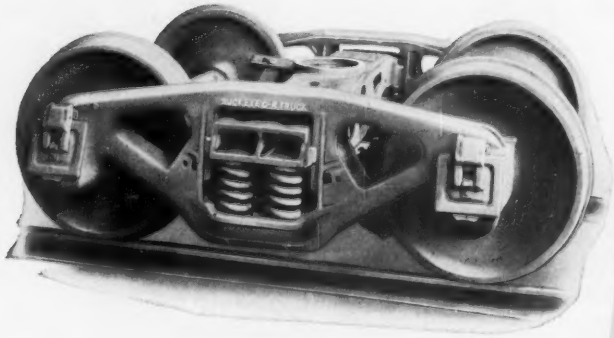
The exterior of the Cornwall station is of glass, stone and decorative brick with exceptionally wide canopies extending slightly below roof level on four sides. The only excavation required for the building was to provide a 30-ft by 40-ft basement level for storage and heating plant. The waiting room encompasses 880 sq ft with two exterior walls practically all glass. The wide-pane windows are separated by aluminum trim.

In addition to the waiting room, the station has a 332-sq ft ticket office, a 15-ft by 38-ft express office, a 2,000-sq ft express and baggage room and a 15-ft by 15-ft roadmaster's office. The platform alongside the tracks extends for 1,600 ft.

On May 2 of this year, eastward freight operation was begun on the new line to compact the subgrade. The following month westward freights were operated. Full scale operation was begun on July 21.



ACCURATE UNIPLANE* JIG GRINDING OF JOURNAL BOX LID FACE IMPROVES CLOSURE



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Railroading After Hours

with Joseph Lynch

RAILROADS NAMED FOR PERSONS—Well, I've been set right on my guess that the Pere Marquette was the only Class I railroad to be named directly for a person. The Monon's Howard Greer phoned me to say he believes the PM got its name from the river of that name, rather than directly from the explorer-missionary.

And Southworth Lancaster of Boston University recalls Morgan's Louisiana & Texas—a precursor of the Texas & New Orleans—as a railroad named for an individual. Professor Lancaster also holds out for the accent in Père in the name of the PM.

LCL UNEXPEDITED—I had a recent experience with LCL freight service—where it took approximately three weeks to get a shipment about 100 miles. Part of the delay could be laid to an inaccurate address, arising from unfamiliarity of the shipper with the service (he should have sent the package by REA). But the actual time in transit to the station where the shipment terminated was 7 days—some 12-14 miles a day, or about 0.5 mph.

I wonder whether there isn't some way whereby the railroads could get entirely out of LCL handling for occasional customers—turning all such traffic over to REA. If railroad LCL service were limited to steady customers with volume business to ship, probably it could be made more nearly remunerative.

I doubt whether a mass carrier like the railroads is suited to do this little retail package business for occasional customers. It's bound to cost them more and take them longer than it does people like REA who are really set up to handle parcels.

ACCOLADE FOR WESTINGHOUSE—I attended the ceremony of the unveiling of the bust of George Westinghouse at the Hall of Fame at New York University on December 1—and an impressive affair it was—especially in the distinguished company in attendance. The principal speaker was Herbert Hoover, and the program was carried out with impressive dignity, down to the last detail.

Election to the Hall of Fame is quite an achievement. Selections are made only once in five years—and no one is eligible until 25 years after his death. Only 86 Americans have, so far, received this distinction. Westinghouse is one of only two or three closely connected with the railroad industry who have been so honored.

Such accolades do not get the attention of a numerous popular audience, but they must make a deep impression in important places. And the recognition given to individuals adds to the prestige of the industries and institutions which they served.

YARDMEN THE KEY?—I was talking to one of the country's biggest shippers the other day—and he told me that railroad service, as he sees it, is largely a reflection of the attitude of yard and switching crews. If they sincerely try to serve shippers promptly, and with care, the shippers usually have little to complain of.

My informant believes the railroads could do a lot worse than to set up some kind of incentive system for these employees. At the very least, officers and supervisors could check the records and see to it that faithful service does not fail to get recognition and praise.

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temperature control systems provide thorough reliability in maintaining temperatures at pre-selected settings.

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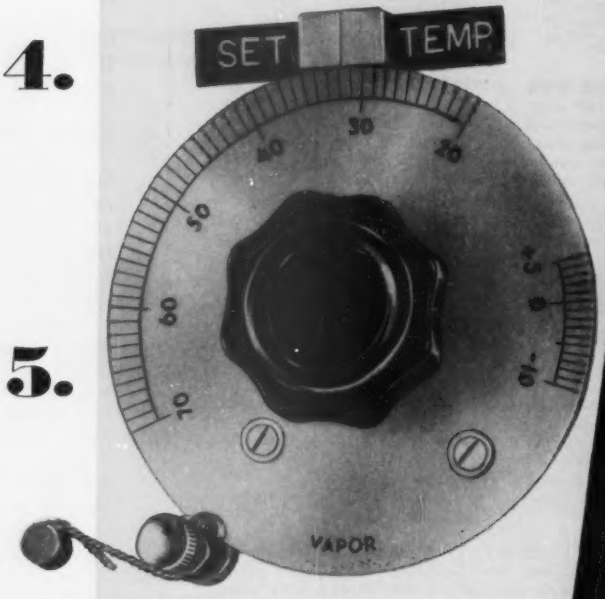

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C&O's 'Railvan' Registers First Class Performance in Mail Haul Role

Eliminating three manual handlings of mail, the Chesapeake & Ohio's experimental "Railvan" has passed its first test in mail service. It set a new record between Detroit and Grand Rapids. Compared with the three-hour terminal-to-terminal passenger schedule, and the four-hour yard-to-yard freight run between those points, the post office-to-post office time was three hours and 18 minutes. In a demonstration of the equipment, at left, unit leaves loading dock with mail cargo. At right, special transfer vehicle switches van from road to tracks with flanged wheels see-sawed into position. Second unit, hauled empty in train, is in rear. Postal officials who rode special train to observe equipment, said Railvan service might be used regularly if C&O can provide cars in quantity. Volume production depends on results of further tests, C&O said.

Speed Up Scientific Effort, Clarke Urges

Chairman Owen Clarke of the ICC last week called for a "vastly accelerated approach" in the railroad's technological programs.

"There is a corollary between the recent national experience," he declared, "and the present situation confronting the railroads." Apparently referring to Soviet accomplishments, Mr. Clarke said it had been shocking to realize "that in order to meet the world threat we must do much more of scientific exploration than ever before."

To meet today's challenges, the ICC chairman told the railroad division of the American Society of Mechanical Engineers at New York City, "we must institute 'crash programs' to speed up technology.

"To my mind the primary challenges confronting you, and to which transportation crash programs should be devoted, are the same old demands for passenger and freight services which are not being fully met.

"There's nothing new in the challenges themselves," Mr. Clarke stated. "People want to travel faster, more comfortably, safer and at a reasonable cost.

"Shippers want to move freight farther, more dependably, with less bother—and at a reasonable cost."

Automation may be one of the answers for the railroads in seeking to meet the challenges they face, as the commissioner sees it. To him, railroading seems the type of transport "most susceptible to improvement in productivity" through developments in this area.

Technical men have a responsibility, he asserted, to know traffic and other problems and "to sell management on how your ideas will improve overall service."

Top rail executives have reaffirmed in recent speeches, Mr. Clarke said, their faith "in the future of the industry that has always been America's most valuable transportation asset." Their statements, he went on, "also reflect confidence in the role which you, the engineers, must play in building the transportation plant of tomorrow."

All projects proposed by engineers can't be undertaken now because of the state of railroad earnings, he conceded.

Commenting that present research is adequate, he suggested that money spent for research must promise to turn up ways of easing financial strains.

NYC Sues on 'Fair Return' Issue

The New York Central has "gone to court" about its right to make a fair return on commutation services.

The Central moved to put its suburban operations on a paying basis in September 1956 when it applied to the New York State Public Service Commission for rate hikes on three lines serving New York City. Last May, the PSC granted a flat increase of 15%, turning down the railroad's petition in all other respects.

This was an "arbitrary and capricious" act, the railroad charged in an appeal just filed with the New York Supreme Court.

(Substantial commuter fare increases are also being sought by the Illinois Central. This road has filed for approval of suburban service price boosts averaging 55% overall—and ranging from 30% to 70%. Additional revenues of $2.8 million would be produced by increases designed to yield a 2.1% return on investment.)

The original NYC petition sought an overall average fare hike of 26%. To make up for the deficiencies of the 15% increase actually granted, and to make up for rising costs, however, the road now seeks a 13.1% boost above the present fare level.

It is the railroad's contention that the PSC, in prohibiting the Central from making a fair return, violated New York State statutes.

SIMMONS-BOARDMAN BUYS 'PURCHASES & STORES'

Railway Purchases & Stores, a 50-year-old business paper serving railroad purchasing and stores departments, has been purchased by Simmons-Boardman Publishing Corporation.

Joint announcement of the sale was made by Edward Wray, RP&S publisher, and A. J. McGinnis, executive vice-president of Simmons-Boardman. Mr. Wray will continue his association with the magazine in an editorial capacity.

The monthly magazine, which began in 1908 as "The Railway Storekeeper," is published in Chicago. The present name was adopted in 1920, when Mr. Wray acquired the property.

Conveyor Moves 83,333 Tons per Day on SP Job

Two and a half million tons of gravel—83,333 tons per day—moved over this conveyor system during a recent 30-day period at the site of Southern Pacific's Great Salt Lake fill project. The two-mile system, designed and built by Hewitt-Robins, Inc., operates with 54-in.-wide main-line belts and a belt speed of 850 ft per minute. Belts carry surge loads as high as 5,000 tons per hour, more than 1,000 tons above designed capacity. Gravel for the giant fill is dug out of the hill in the background of the photo, then trucked to hoppers.

Mine Products Rates Below Costs

If 1955 railroad rates had been on a fully-distributed-cost basis, rates on commodities in the Products of Mines group would have averaged 31.5% higher.

Average rates on commodities in the Manufactures and Miscellaneous group and on forwarder traffic would have been down 23.4% and 20.3%, respectively.

Rates in the Animals and Products group were almost on the fully-distributed-cost basis. It would have taken an increase of only 0.1% to put them there.

This was shown by a study (Statement No. 5-57) issued by the ICC's Bureau of Accounts, Cost Finding and Valuation. Like similar previous studies, it indicates what the revenues from various commodities contributed to the railroads' "overhead burden."

The general showing was that the Manufactures and Miscellaneous group carried 67.2% of the 1955 overhead burden while accounting for only 49% of the year's freight revenue. Products of Mines accounted for 24.8% of the revenue but carried only 14% of the overhead burden.

As to other groups, Products of Agriculture contributed 9.7% to overhead and accounted for 13.1% of the revenue; Products of Forests, 5.7% and 7.7%, respectively; Animals and Products, 1.7% and 3.7%; forwarder traffic 1.7% and 1.7%.

Manufactures and Miscellaneous and forwarder traffic would have been the only groups to pay less in 1955 if the rates had been on a full-cost basis. In addition to the increases on Products of Mines and Animals and Products, there would have been advances of 11.7% and 3.6%, respectively, on Products of Forests and Products of Agriculture.

Other data in the report showed that each commodity group accounted for 1955 revenues exceeding its out-of-pocket costs. Ratios of revenues to out-of-pocket costs were: Manufactures and Miscellaneous, including forwarder traffic, 176; Products of Forests, 131; Products of Agriculture, 130; Products of Mines, 122; Animals and Products, 118.

Address—A Correction

Rhodia, Inc., manufacturer of Alamask DI-2K, an odor-control additive, is located at 60 East 56th st., New York 22, not at the address given with the description of the additive on p. 46 of the Nov. 4 Railway Age.

ICC Bureau Briefs First Trucker Commodity Reports

The first motor carrier commodity statistics reported to the ICC indicate that truckload shipments carried by reporting truckers in 1956 averaged 14.1 tons and yielded a per-ton revenue of $9.45.

Last year was the first for which the reports were required. The 748 reporting truckers were intercity common and contract carriers with annual gross revenues of $1,000,000 or more, "excluding certain classes of carriers handling specialized commodities."

Preliminary summaries of the reports were compiled by the commission's Bureau of Transport and Statistics and published in its "Transport Economics." In addition to the average weight and per-ton revenue figures, the summaries showed that the reporting truckers in 1956 handled 10.9 million shipments, of which 85% were terminated by the originating carriers.

Gross revenue amounted to $1,454 million, of which $1,117 million came from products in the Manufactures and Miscellaneous group. Revenues from the other five major commodity groups ranged from $77.6 million for Animals and Products to $6 million for forwarder traffic. Revenue-per-ton figures ranged from $18.35 for Animals and Products to $3 for Products of Mines.

Westinghouse in Hall of Fame

Honoring the inventor's contributions to railroad safety, a bust of George Westinghouse was unveiled December 1 at the New York University Hall of Fame for Great Americans. Former President Herbert Hoover, who made the official address at ceremonies, poses in front of the bust with George Westinghouse III, great-grandson of the Westinghouse Air Brake Co. founder. Presentation of the bust was made by W. F. Ryan, president, American Society of Mechanical Engineers. The unveiling of the bust was done by W. J. Barrett, president, American Institute of Electrical Engineers.

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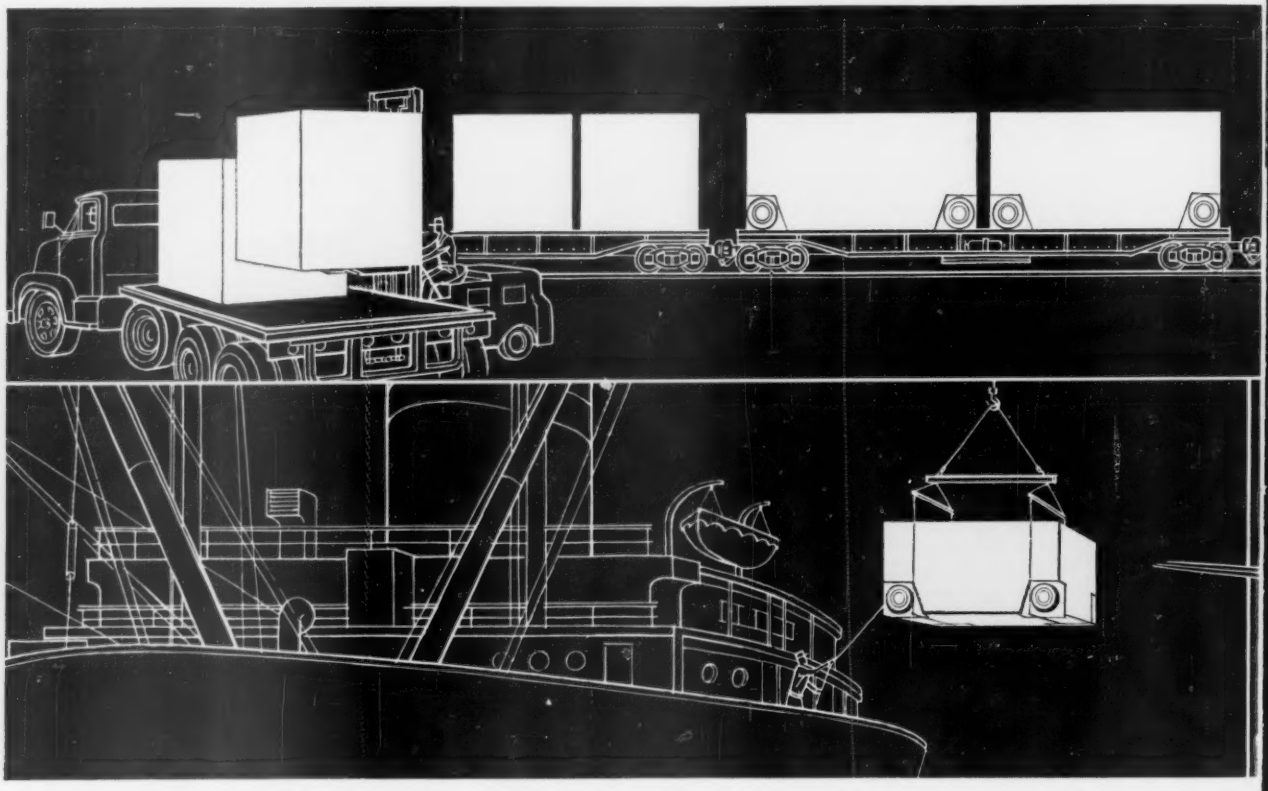

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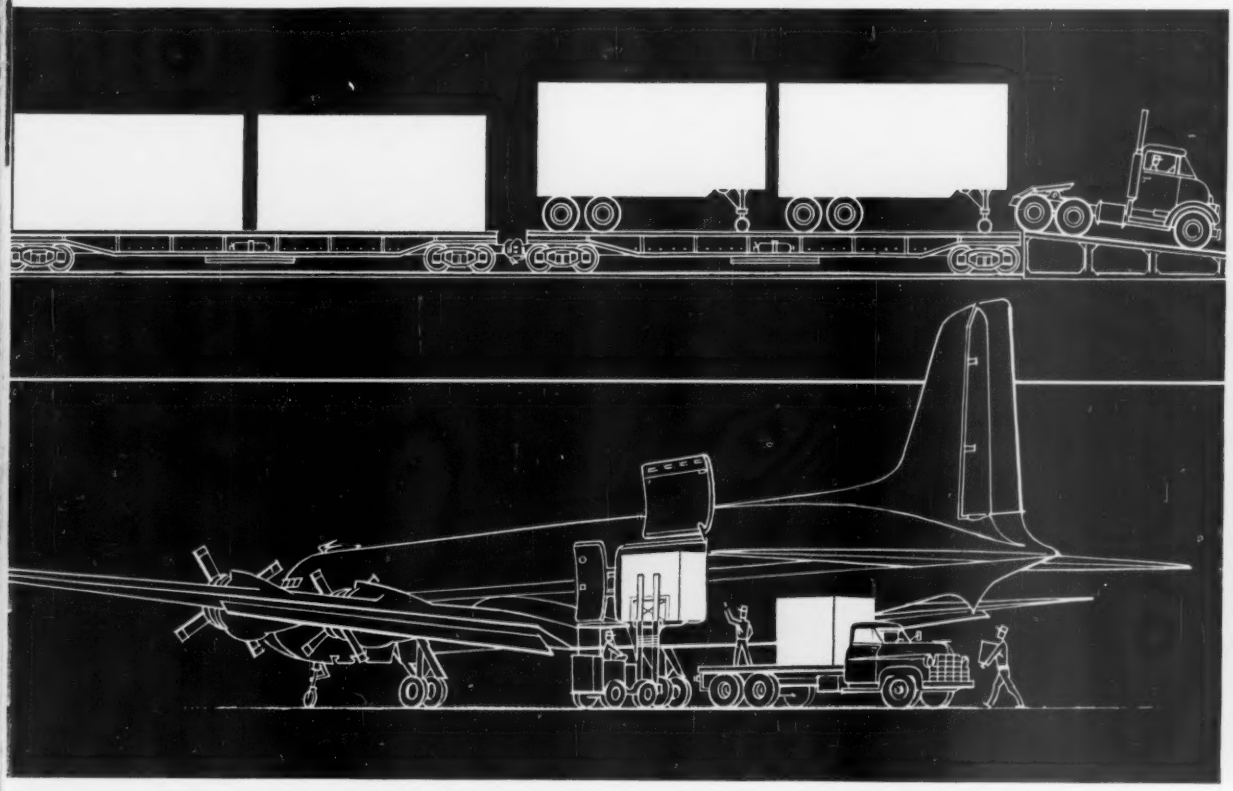


MARKET OUTLOOK *at a glance*

Carloadings Drop 12.5% In Thanksgiving Week

Loading of revenue freight in the week ended November 30 totaled 553,722 cars, the Association of American Railroads announced on December 5. This was a decrease of 79,041 cars, or 12.5%, compared with the previous week; a decrease of 198,424 cars, or 26.4%, compared with the corresponding week last year; and a decrease of 170,064 cars, or 23.5%, compared with the equivalent 1955 week.

Loadings of revenue freight for the week ended November 23 totaled 632,763 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, November 23

District	1957	1956	1955
Eastern	99,940	103,478	109,680
Alleghany	123,646	129,783	138,646
Pocahontas	56,212	52,574	52,159
Southern	111,829	111,135	118,077
Northwestern	71,578	91,665	87,710
Central Western	122,942	112,995	114,129
Southwestern	46,616	48,990	51,549
Total Western Districts	241,136	253,650	253,388
Total All Roads	632,763	650,620	671,950
Commodities:			
Grain and grain products	50,650	41,595	42,729
Livestock	8,207	8,663	9,756
Coal	129,934	127,760	126,759
Coke	9,154	12,685	12,815
Forest Products	34,026	35,784	36,331
Ore	28,115	47,233	49,723
Merchandise l.c.l.	49,952	49,590	53,822
Miscellaneous	322,725	327,310	340,015
November 23	632,763	650,620	671,950
November 16	647,298	763,898	766,216
November 9	675,273	772,850	792,042
November 2	713,994	800,367	804,261
October 26	703,688	816,803	829,648
Cumulative total, 47 weeks	32,725,206	34,451,809	34,243,704

IN CANADA. — Carloadings for the seven-day period ended November 21 totaled 76,926 cars, compared with 78,161 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
November 21, 1957	76,926	29,221
November 21, 1956	83,749	33,469
Cumulative Totals:		
November 21, 1957	3,666,667	1,446,367
November 21, 1956	3,984,498	1,556,257

New Equipment

FREIGHT-TRAIN CARS

► *Freight Car Ownership Increases.*—Class I roads on November 1 owned 39,066 more freight cars than on same date last year, AAR report summarized below shows; repair ratio remained same as on October 1 of this year, but was 0.9% higher than year ago.

	Nov. 1, 1957	Nov. 1, 1956	Change
Car ownership	1,742,218	1,703,683	+39,066
Waiting repairs	85,979	68,275	+17,704
Repair ratio	4.9%	4.0%	+ 0.9%

► *Louisville & Nashville.*—Ordered 475 box cars, Pullman-Standard, costing approximately $4,400,000, delivery to begin in January; included are 225 40-ft cars with roller bearings, nailable steel floors and 8-ft doors, and 250 cars with friction bearings and wood floors.

PASSENGER-TRAIN CARS

► *South Africa Wants Passenger Cars.*—Bids on passenger cars estimated to cost $56,000,000 have been invited by the Administration of South African Railways and Harbors, says Foreign Commerce Weekly (Railway Age, May 13, p. 13); plans and specifications may be reviewed at Consulate General, Union of South Africa, 655 Madison ave., New York; bids are returnable by next March 14.

LOCOMOTIVES

► *Locomotive Ownership.*—While the number of diesel-electric locomotives owned or leased by Class I roads increased by 44 during the past month, 55 steam and 19 electric locomotives were retired during the same period; AAR report summarized below shows comparison with previous year.

	Owned or Leased November 1		Stored Serviceable November 1		Waiting Shop November 1	
	1957	1956	1957	1956	1957	1956
Diesel (Units)	27,108	26,006	161	32	938	912
Steam (Locomotives)	2,697	3,879	721	502	566	529
Electric (Units)	587	604	16	12	55	50

► *Paulista.*—This Brazilian railroad has ordered 10 990-hp diesel-electric units from General Electric at an approximate cost of $1,500,000; units will be used for passenger, freight and switching service in state of Sao Paulo.

New Facilities

► *Clinchfield Coal Co.*—Awarded contract to Union Switch & Signal—Division of Westinghouse Air Brake Company for electro-pneumatic car retarders and direct-acting switch layouts in coal preparation plant near Corbo, Va.; installation will control movement of coal cars by gravity from dumper where raw coal is unloaded, through pockets where cleaned coal is loaded, and into shipping storage yard; excess empty cars are routed on by-pass.

► *Texas City Terminal.*—Awarded contract for construction of locomotive shop and shelter; facility will include locomotive repair pit and 20-ton overhead crane, storeroom, storekeeper's office, master mechanic's office and locker space for engine crew personnel; estimated cost $90,000.

a RAILWAY AGE time-saver page

People in the News

Stanfield B. Johnson
ASR

William E. Turner
RF&P

ASSOCIATION OF SOUTHEASTERN RAILROADS.—**Stanfield B. Johnson,** general solicitor, **Southern Pacific,** San Francisco, elected chairman, Association of Southeastern Railroads, Washington, D.C., effective January 1, 1958.

BALTIMORE & OHIO.—**Carroll R. Bennett,** district freight agent, Dayton, Ohio, appointed district freight representative, Omaha, Neb., succeeding **R. A. Rietz,** recently named division freight agent, Springfield, Ill. (Railway Age, Nov. 18, p. 45). **William Carder, Jr.,** traveling freight agent, Dayton, succeeds Mr. Bennett.

DETROIT, TOLEDO & IRONTON.—**J. E. Messinger,** assistant purchasing agent, Dearborn, Mich., appointed purchasing agent there, succeeding **C. E. Rooney,** who retired October 31. Mr. Rooney will act in an advisory and consulting capacity until December 31.

DENVER & RIO GRANDE WESTERN.—**J. F. Selby,** trainmaster, Pueblo, Colo., promoted to welding supervisor, Denver, and is succeeded by **R. L. Jacobsen,** assistant trainmaster, Pueblo. **H. V. Meek,** trainmaster, Alamosa, Colo., appointed assistant superintendent, Grand Junction, Colo., succeeding **S. A. Dougherty,** who has returned to engine service duties at his own request. **L. O. Ficklin,** assistant trainmaster, Alamosa, named to replace Mr. Meek.

George A. Lee appointed district freight and passenger agent, Philadelphia.

FLORIDA EAST COAST.—**W. G. Dailey,** chief clerk to auditor of disbursements, St. Augustine, Fla., appointed auditor of disbursements there, succeeding **Fred Kronenbitter,** retired.

FRISCO.—**E. R. Belt,** vice-president—comptroller, St. Louis, named vice-president—finance. **C. E. Blair,** general auditor, appointed comptroller, and is succeeded by **H. B. Parker,** assistant vice-president.

LEHIGH VALLEY.—**Thomas J. Lardner,** assistant secretary and assistant treasurer, New York, elected secretary and treasurer, succeeding the late **Dennis J. Mullane. Edward C. Riskie,** cashier and paymaster, named assistant treasurer.

MILWAUKEE.—**R. B. Amis,** general agent, Los Angeles, appointed regional assistant to district traffic manager there, and is succeeded by **J. M. Fortman,** assistant general agent.

MONON.—**Gilbert L. Harris,** freight traffic manager, Chicago, retired November 30.

RICHMOND, FREDERICKSBURG & POTOMAC.—**William E. Turner,** freight traffic manager—sales, **Chesapeake & Ohio,** Pittsburgh, Pa., elected vice-president, traffic and industrial development, RF&P, Richmond, Va., effective January 1.

G. P. Hayes, Jr., and **C. E. Whitmore, Jr.,** ap-

pointed engineer of construction and assistant engineer of construction, respectively, Richmond.

UNION PACIFIC.—Thomas S. Davis appointed supervisor of rules, **Wilmar F. Griffin,** assistant superintendent of safety and courtesy, Nebraska division, and **Robert E. Irion,** safety and courtesy representative, Eastern district, all with headquarters at Omaha.

OBITUARY

Armand T. Mercier, 76, retired president of the **Southern Pacific,** died November 21.

John P. Dockter, 66, district manager, Car Service Division, **Association of American Railroads,** Cincinnati, died November 26.

Joseph G. Wheeler, 60, retired passenger traffic manager of the **Western Pacific,** died November 21 at his home in Palo Alto, Calif.

Charles R. Ellicott, 77, retired vice-president of **Westinghouse Air Brake Company** and a 48-year veteran of his company, died at Glen Ridge, N.J., November 24.

Hugh A. Marshall, 62, one of the pioneering railroad water-service men—first with the Missouri Pacific, then the Chesapeake & Ohio and latterly the **National Aluminate Corporation**—died in Jacksonville, Fla., November 23, after long illness.

Supply Trade

William R. Goodwin and **Robert K. Wickliffe** have been named sales engineers of **General Railway Signal Company,** assigned to the Chicago and New York offices, respectively. Mr. Goodwin was an application engineer in the Rochester offices of the company, and Mr. Wickliffe a signal supervisor on the Baltimore & Ohio.

Waukesha Motor Company has named the following officers to head its management group: **Charles E. Nelson, Jr.,** executive vice-president; **J. Grant Swain,** vice-president, sales; and **Newton H. Willis,** vice-president, engineering.

Edwin Hodge, Jr., has been elected chairman of the board of **Westinghouse Air Brake Company.** He has been a director of the company since 1949 and was elected chairman of the executive committee in 1955. Mr. Hodges is chairman and president of **Pittsburgh Forgings Company** and a director of several other companies.

George A. Waterman has joined **Olin Mathieson Chemical Corporation** as director of product sales and engineering for Olin Aluminum. He had been manager, extrusion sales, for **Kaiser Aluminum & Chemical Sales, Inc.**

Paul F. Behn has been appointed manager of works of the Michigan City, Ind., freight car shop of **Pullman-Standard Car Manufacturing Company,** to succeed the late **Arthur A. Lagmann** (Railway Age, Oct. 14, p. 48).

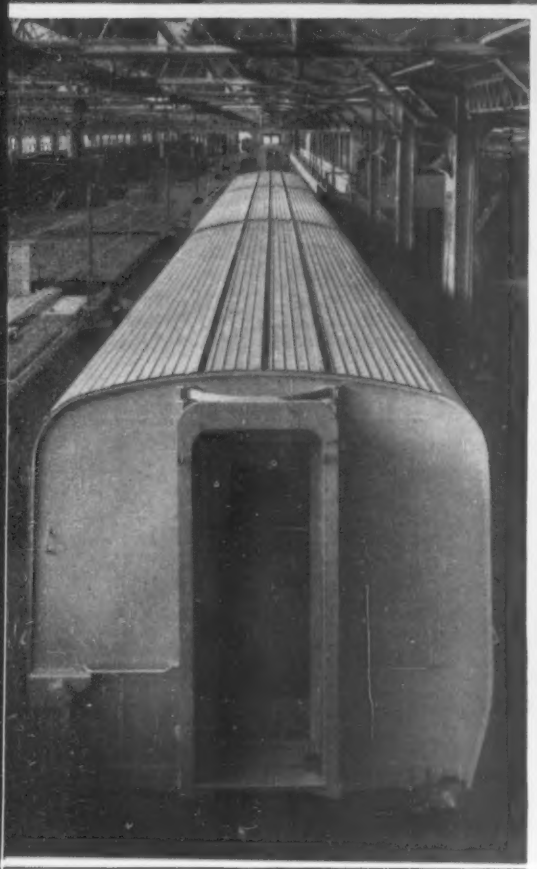
G. K. Adams has been appointed sales engineer for **Griswold Signal Company** at Chicago. He was formerly engineer of signal design, Chicago, Burlington & Quincy.

Fred H. Ueckermann, who has headed the Atlanta district office of the wire rope division, **John A. Roebling's Sons Corporation,** has been named Chicago district manager. **Harry L. Truitt, Jr.,** a sales representative in Florida territory, replaces Mr. Ueckermann at Atlanta.

Duffy-Norton Company has appointed **P. J. Baltes** as Ohio district sales manager, at Cleveland.

A Message to Management...

To reduce weight and to insure



Talgo car underframe combines great strength with minimum weight

USS "T-1" Steel, which has a minimum yield strength of 90,000 psi, nearly 3 times that of structural carbon steel, is used in about 69% of the light and rugged underframe. The center sills that carry the main longitudinal stresses are of USS "T-1" Steel, as are the coupler housing, draft gear pockets, and collision posts. USS COR-TEN, with a minimum yield point of 50,000 psi, 1½ times that of structural carbon steel, is used in cross members, stringers, Zee-section side sills, and tapping plates.

USS High-Strength-Level Steels help reduce weight 20,000 lbs. per car*

The weight saving of 50 tons in a typical five-car Talgo train is important. Accomplished with the help of USS COR-TEN and USS "T-1" Steels, it allows the use of less motive power, permits fast acceleration and deceleration for multi-stop, commuter service. Despite the lighter weight of the Talgo cars—only 700 or 800 lbs. per passenger seat and less than half the weight of comparable conventional equipment—the high strength levels of the steels used make it possible to meet the high unit strength requirements and the 800,000-lb. buff load for which the cars are designed.

**As compared to construction with structural carbon steel.*

• • •

As illustrated at left, the ACF Talgo-type cars are composed of three articulated units, semi-permanently coupled together. Wheel units are mechanically guided so that the wheels always meet the rails at what ACF calls a zero angle, regardless of whether the train is going forward or backward and no matter what degree of curve the train is passing through. The result is a reversible car that provides a comfortable ride, noticeably free of side sway even at speeds up to 90 mph on light rail with twisting curves, where speeds for conventional equipment are limited to 70 mph. Wheels and axles, furnished by United States Steel, were modified jointly by ACF and USS for Talgo use.

speedy, safe and low-cost operation

ACF builds new Talgo-type trains with two outstanding USS Specialty Steels: USS COR-TEN High-Strength Low-Alloy Steel USS "T-1" Constructional Alloy Steel

In its advanced version of the Talgo train, ACF offers three highly desirable benefits: (1) low first cost, (2) lower operating and maintenance expense and (3) a train that can be operated on faster schedules without excessive top speeds. And because the elimination of excess weight is of prime importance in attaining these benefits, ACF engineers just naturally turned to construction materials that have proved practical and profitable in reducing weight to a minimum.

ACF's new Talgo train marks a big step forward in passenger train design. It incorporates many important advancements in the basic ideas featured in the revolutionary, money-making streamliners of the early "thirties" —low profile, extremely light weight, articulation and head-end power. And it is built with the same strong, durable, weight-saving steel, USS Cor-Ten, plus an important newcomer—USS "T-1" Constructional Alloy Steel.

Just as the use of superior steels helped make yesterday's so-called "trains of the future" profitable to operate, the ability of USS Cor-Ten Steel and USS "T-1" Steel to reduce weight safely and to greatly increase durability will likewise pay off in the new Talgo trains.

By the judicious use of these strong, durable steels, ACF engineers have been able, in the Talgo train, not only to produce a car structure that is exceptionally strong and durable, but to provide a passenger seat for 50 to 75% less weight per passenger than conventional designs—and at $1500 lower cost per seat. At the same time, because of the lighter weight, low center of gravity, and because the wheels are steered through curves, the Talgo train is capable of cutting as much as 25% off conventional schedules with relatively little increase in top speeds.

In USS Cor-Ten Steel, and USS "T-1" Steel, car designers will find a ready answer to their search for superior materials for reducing passenger car weight safely—and economically as well.

We welcome the opportunity of working with you in applying them to *your* trains of tomorrow.

United States Steel Corporation, Pittsburgh • American Steel & Wire Division, Cleveland
Columbia-Geneva Steel Division, San Francisco • National Tube Division, Pittsburgh • Tennessee Coal & Iron Division, Fairfield, Ala.
United States Steel Supply Division, Warehouse Distributors
United States Steel Export Company, New York

1933 1957 USS HIGH STRENGTH STEELS *24 YEARS OF PERFORMANCE*

UNITED STATES STEEL

LOW-COST BALLAST CLEANING

—with a 4-man crew and 3 "Jimmy" Diesels

An operator for each machine and two laborers—that's all the manpower needed to clean ballast with this Pullman-Standard Power Ballast Cleaner and Winch Car team. It cleans both previously cribbed crib ballast and ballast of both shoulders at the rate of 800 to 1250 feet an hour, depending on depth and condition of ballast.

This fast-working unit gets its "drive" from three General Motors Series 71 two-cycle Diesels—a "2-71" on the winch car, a "6-71" and "2-71" on the cleaner. J. W. Mangan, Supt. of Work Equipment for the New York, New Haven & Hartford Railroad, reports *six years' trouble-free service with the GM Diesels in their machines.* Because of their excellent performance, the New Haven has recently ordered three more GM "71" engines to repower tie-tampers.

Whether you're buying new M/W equipment or repowering old, you'll save money by standardizing on "Jimmy" Diesels. Practically all wearing parts of GM Series 71 engines are interchangeable, regardless of application, size or horsepower. So you can maintain a whole fleet—both on- and off-track equipment—with a minimum of readily available, lower-cost parts. Call your GM Diesel distributor—or write us.

DETROIT DIESEL Engine Division of General Motors, Detroit 28, Michigan

GM GENERAL MOTORS DETROIT DIESEL POWER

Regional Offices: New York, Atlanta, Detroit, Chicago Dallas, San Francisco

In Canada: GENERAL MOTORS DIESEL LIMITED, London, Ontario

Now—more than ever—it pays to standardize on GM Diesel—available in 1485 applications of power equipment built by more than 175 manufacturers

Parts and Service Worldwide

GM Diesel-powered Pullman-Standard Ballast Cleaner and Winch Car at work on New Haven Railroad.

ADVERTISERS

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Equipment used or resale acceptable in this section

Waiting to Agree Can Stifle Progress

When is a railroad manager justified in holding out for a minority viewpoint—and when should he "go along with the crowd"?

That may look like a theoretical question—but it is as practical a question as can be asked. Every railroad executive has to answer it, in one way or another, every day of the week.

Here is the dilemma: without a lot of unanimity among managements, the railroads cannot operate a nationwide transportation service. But without considerable minority action — "going it alone"—progress is stifled.

Take relations with the unions, for instance. Not infrequently union strategy, in demanding some concession, decrees concentration upon one railroad. If that railroad gives in, the union can then divert the attack to another company—and so on down the line.

As long as the unions insist on dealing with wage questions on a national basis—it looks, at least at first glance, as if the union strategy of "picking them off one by one" is pretty poor business for the railroads. For one railroad to make concessions far in advance of those any other railroad has made would seem to be a rather expensive indulgence of individualism.

On the other hand, there are some kinds of experimentation—particularly with rates and fares—that individual roads can undertake, and about which the industry as a whole could never agree, in advance.

To be more specific—take the question of passenger fares. There's no lack of unanimity among railroad managements that they need more earnings (or small losses) from the passenger business. But some managements believe that better earnings can be achieved through repeated fare increases. Other managements believe that there is such a thing as an "optimum" rate of fare—and that, if the attempt is made to charge a higher rate, the result will reduce net earnings, instead of increasing them.

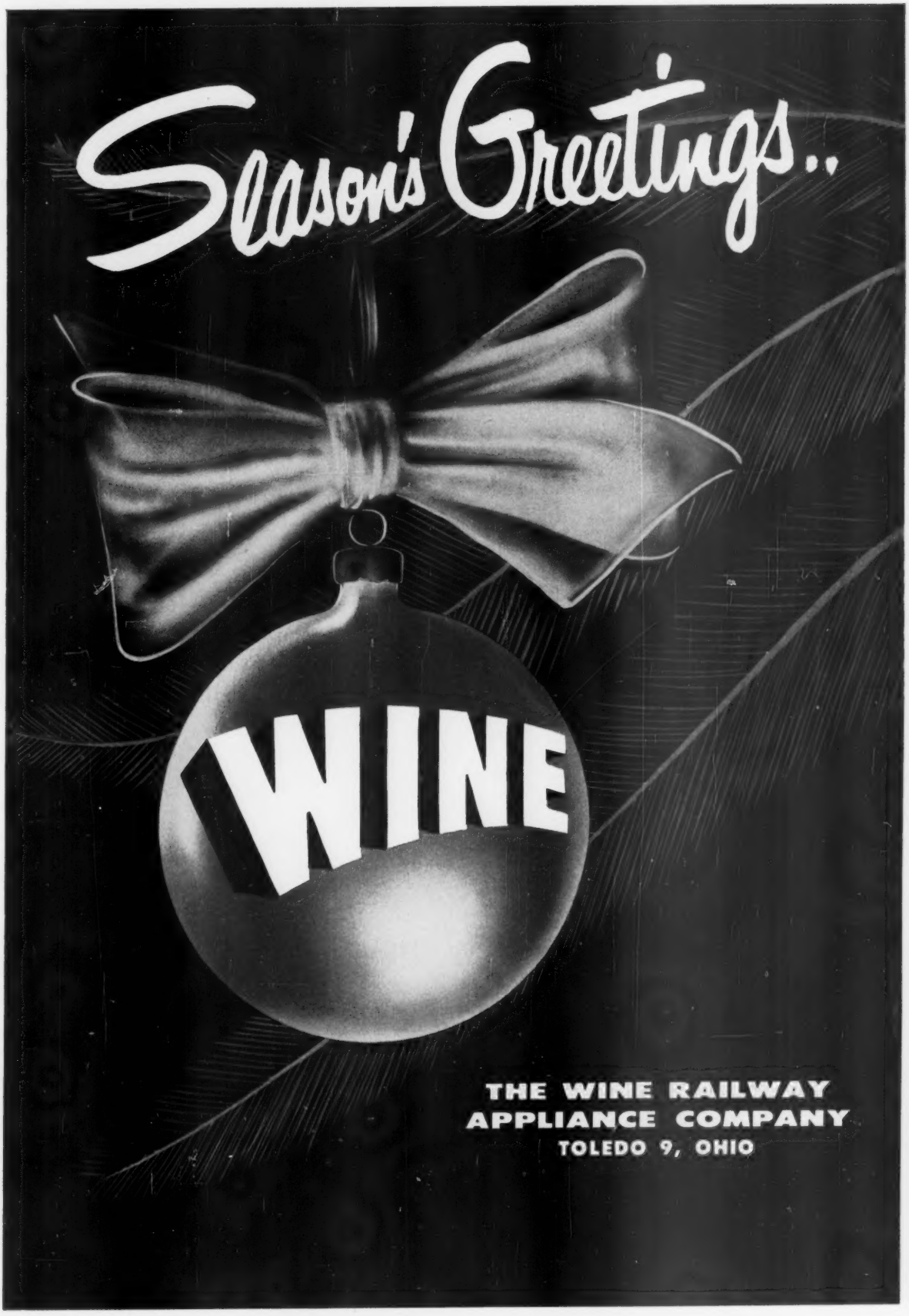
•

Nobody knows for certain which side is right in this issue. The only way to get a definitive answer is to experiment. So the road which seeks to "go it alone," on some fare policy that the rest of the roads are reluctant to follow, is not a maverick: instead, it is doing pioneering of a kind which may in due course be beneficial to the entire industry.

There are some questions—e.g., such as standards for equipment to be accepted in interchange—where joint action is unavoidable and where decisions must be mandatory upon all railroads. It is on such questions that majorities have to exercise a lot of self-discipline. Because, if they drag their heels in accepting promising innovations, they may be acting as obstacles in the path of progress.

On the other hand, where concessions (e.g., to unions or shippers) are demanded from one railroad—under the strategy of "picking them off one at a time"—then the need for self-discipline falls on the individual company. By purchasing a little peace from a labor union—or a little traffic from a shipper wielding a "traffic club"—the individual railroad may be undermining the railroad industry's economic foundations. And individual companies do not thrive for long when the industry as a whole is on the downgrade.

ACTION YOU CAN TAKE TODAY: Take another look at pages 16 and 17 of this issue. How about clipping and mailing them to where you think they would do most good . . . maybe with a note from you?


Season's Greetings..
WINE
THE WINE RAILWAY
APPLIANCE COMPANY
TOLEDO 9, OHIO

"ROLLER FREIGHT" WILL KEEP HER FROM HAVING *NOTHING TO WEAR*

WHEN does a woman have "nothing to wear"? When the store can't give her the dress she saw in the fashion magazine that came out yesterday. Fashions, like fresh peaches, lose their value if they don't get there in time.

Here's what the railroads are doing about it. They're switching to "Roller Freight", cars on Timken® tapered roller bearings. "Roller Freight" speeds shipping, delivers the goods on time. And that's Better-ness—the American conviction there's always a better way to make work easier, life richer, pretty girls prettier.

"Roller Freight" ends the No. 1 cause of freight delay—the hot box—railroaders' term for overheated bearings. And "Roller Freight" moves out of terminals faster because Timken bearings cut bearing inspection time 90%.

The railroads have over 24,500 cars on Timken bearings—and that's only the beginning. "Roller Freight" will bring Better-ness to everybody who buys or sells. The Timken Roller Bearing Company, Canton 6, O. Cable: "TIMROSCO".

Dress by Samuel Winston, "Roller Freight" cars by Boston and Maine and Atlantic Coast Line.

This is BETTER-ness

America is for it and **TIMKEN**® *bearings help you get it*